e² studio 4.1.0.18

e² studio 4.1.0 release documentation

This document outlines the device support, new features added in 4.1.0, fixed issues and open issues in e^2 studio 4.1.0.

1. Project Generator Support

CPU	Family	Devices
	C1H	R7F701260, R7F701270,(Debug Support Only)
	C1M	R7F701263, R7F701271,(Debug Support Only)
	E1L	R7F701201, R7F701205,(Debug Support Only)
	E1M-S	R7F701202, R7F701204,(Debug Support Only)
	E1x-FCC1	R7F701Z05, R7F701Z06, R7F701Z07,(Debug Support Only)
	F1H	R7F701501, R7F701502, R7F701503, R7F701506, R7F701507, R7F701508, R7F701511, R7F701512, R7F701513, (Debug Support Only)
	F1H-GW	R7F701521, R7F701522, R7F701524, R7F701525,(Debug Support Only)
	F1L	R7F701002xAFP, R7F701003xAFP, R7F701006xAFP, R7F701007xAFP, R7F701008xAFP, R7F701009xAFP, R7F701010xAFP, R7F701011xAFP, R7F701012xAFP, R7F701013xAFP, R7F701014xAFP, R7F701015xAFP, R7F701016xAFP, R7F701017xAFP, R7F701018xAFP, R7F701019xAFP, R7F701020xAFP, R7F701021xAFP, R7F701022xAFP, R7F701023xAFP, R7F701024xAFP, R7F701025xAFP, R7F701026xAFP, R7F701027xAFP, R7F701028xAFP, R7F701029xAFP, R7F701030xAFP, R7F701032xAFP, R7F701033xAFP, R7F701030xAFP, R7F701032xAFP, R7F701033xAFP, R7F701030xAFP, R7F701044, R7F701045, R7F701046, R7F701040, R7F701040, R7F701040, R7F701050, R7F701051, R7F701052, R7F701053, R7F701054, R7F701055, R7F701056, R7F701057, (Debug Support Only)
	F1M	R7F701544, R7F701545, R7F701548, R7F701549, R7F701552, R7F701553, R7F701564, R7F701565, R7F701568, R7F701569, R7F701572, R7F701573, (Debug Support Only)
	P1M	R7F701304, R7F701305, R7F701310, R7F701311, R7F701312, R7F701313, R7F701314, R7F701315, R7F701318, R7F701319, R7F701320, R7F701321, R7F701322, R7F701323,(Debug Support Only)
RH850	-	R7F701060xAFP, R7F701062xAFP, R7F701064xAFP, R7F701065xAFP, R7F701067xAFP, R7F701069xAFP, R7F701071xAFP,(Debug Support Only)
	D1A	R5F10CGB, R5F10CGC, R5F10CGD, R5F10CLD, R5F10CMD, R5F10CME, R5F10DGC, R5F10DGD, R5F10DGE, R5F10DLD, R5F10DLE, R5F10DMD, R5F10DME, R5F10DMF, R5F10DMG, R5F10DMJ, R5F10DPE, R5F10DPF, R5F10DPG, R5F10DPJ, R5F10DPK, R5F10DPL, R5F10DSJ, R5F10DSK, R5F10DSL, R5F10TPJ
	F12	R5F10968, R5F1096A, R5F1096B, R5F1096C, R5F1096D, R5F1096E, R5F109AA, R5F109AB, R5F109AC, R5F109AD, R5F109AE, R5F109BA, R5F109BB, R5F109BC, R5F109BD, R5F109BE, R5F109GA, R5F109GB, R5F109GC, R5F109GD, R5F109GE, R5F109LA, R5F109LB, R5F109LC, R5F109LD, R5F109LE
	F13	R5F10A6A, R5F10A6C, R5F10A6D, R5F10A6E, R5F10AAA, R5F10AAC, R5F10AAD, R5F10AAE, R5F10ABA, R5F10ABC, R5F10ABD, R5F10ABE, R5F10AGA, R5F10AGC, R5F10AGD, R5F10AGE, R5F10AGF, R5F10AGG, R5F10ALC, R5F10ALD, R5F10ALE, R5F10ALF, R5F10ALG, R5F10AME, R5F10AMF, R5F10AMG, R5F10BAC, R5F10BAD, R5F10BAE, R5F10BAF, R5F10BAG, R5F10BBC, R5F10BBD, R5F10BBE, R5F10BBF, R5F10BBG, R5F10BGC, R5F10BGD, R5F10BGE, R5F10BGF, R5F10BGG, R5F10BLC, R5F10BLD, R5F10BLE, R5F10BLF, R5F10BLG, R5F10BME, R5F10BMF, R5F10BMG
	F14	R5F10PAD, R5F10PAE, R5F10PBD, R5F10PBE, R5F10PGD, R5F10PGE, R5F10PGF, R5F10PGG, R5F10PGH, R5F10PGJ, R5F10PLE, R5F10PLF, R5F10PLG, R5F10PLH, R5F10PLJ, R5F10PME, R5F10PMF, R5F10PMG, R5F10PMH, R5F10PMJ, R5F10PPE, R5F10PPF, R5F10PPG, R5F10PPH, R5F10PPJ
	F15	R5F113GK, R5F113GL, R5F113LK, R5F113LL, R5F113MK, R5F113ML, R5F113PG, R5F113PH, R5F113PJ, R5F113PK, R5F113PL, R5F113TG, R5F113TH, R5F113TJ, R5F113TK, R5F113TL
	F1A	R5F114GC, R5F114GD, R5F114GE, R5F114GF, R5F114GG
RL78	G10	R5F10Y14, R5F10Y16, R5F10Y17, R5F10Y44, R5F10Y46, R5F10Y47

G12	R5F10266, R5F10267, R5F10268, R5F10269, R5F1026A, R5F10277, R5F10278, R5F10279, R5F1027A, R5F102A7, R5F102A8, R5F102A9, R5F102AA, R5F10366, R5F10367, R5F10368, R5F10369, R5F1036A, R5F10377, R5F10378, R5F10379, R5F1037A, R5F103A7, R5F103A8, R5F103A9, R5F103AA
	R5F1006A, R5F1006C, R5F1006D, R5F1006E, R5F1007A, R5F1007C, R5F1007D, R5F1007E, R5F1008A, R5F1008C, R5F1008D, R5F1008E, R5F100AA, R5F100AC, R5F100AD, R5F100AE, R5F100AF, R5F100AG, R5F100BA, RSF100BC, R5F100BD, R5F100BE, R5F100BF, R5F100BG, R5F100CA, R5F100CC, R5F100CD, R5F100CE, R5F100CF, R5F100CG, R5F100EA, R5F100CA, R5F100CC, R5F100EE, R5F100EF, R5F100CF, R5F100FA, R5F100FA, R5F100FD, R5F100FD, R5F100FG, R5F100FG, R5F100FJ, R5F100FA, R5F100FL, R5F100GA, R5F100GC, R5F100GD, R5F100GB, R5F100FH, R5F100FJ, R5F100FK, R5F100FL, R5F100GA, R5F100GC, R5F100GD, R5F100JC, R5F100JD, R5F100G, R5F100GH, R5F100GJ, R5F100GK, R5F100GL, R5F100JC, R5F100JD, R5F100JE, R5F100JF, R5F100JH, R5F100JJ, R5F100JL, R5F100JL, R5F100JD, R5F100JE, R5F100JF, R5F100JH, R5F100JJ, R5F100JL, R5F100JL, R5F100JD, R5F100JE, R5F100JF, R5F100JH, R5F100JJ, R5F100JL, R5F100JL, R5F100JD, R5F100JD, R5F100JF, R5F100JH, R5F100JJ, R5F100JL, R5F100JL, R5F100JD, R5F100JE, R5F100JF, R5F100JH, R5F100JJ, R5F100JJ, R5F100JL, R5F100JC, R5F100JD, R5F100JF, R5F100JF, R5F100JH, R5F100JJ, R5F100JL, R5F100JL, R5F100JC, R5F100JF, R5F100JF, R5F100JH, R5F100JH, R5F100JL, R5F100JL, R5F100JC, R5F100JF, R5F100JF, R5F100JH, R5F100JH, R5F100JL, R5F100JL, R5F100JC, R5F100JH, R5F100JF, R5F100JH, R5F100JH, R5F100JJ, R5F100JK, R5F100JC, R5F100JH, R5F100JF, R5F100JH, R5F100JH, R5F100JJ, R5F100JF, R5F100JG, R5F100JH, R5F100JH, R5F100FL, R5F100JH, R5F100JJ, R5F100JF, R5F100JG, R5F100JH, R5F101AG, R5F101BD, R5F101AE, R5F101AA, R5F101AC, R5F101AD, R5F101AE, R5F101AG, R5F101AG, R5F101BA, R5F101BD, R5F101BD, R5F101BE, R5F101AF, R5F101AF, R5F101AG, R5F101BA, R5F101AE, R5F101AB, R5F101BE, R5F101AF, R5F101AG, R5F101AG, R5F101BA, R5F101AC, R5F101AB, R5F101BF, R5F101BA, R5F101AC, R5F101AG, R5F101BA, R5F101AC, R5F101AB, R5F101AB, R5F101AE, R5F101AC, R5F101AG, R5F101BA, R5F101AC, R5F101AB, R5F101AB, R5F101AB, R5F101AC, R5F101AG, R5F101AF, R5F101AC, R5F101AB, R5F101AB, R5F101AB, R5F101AF, R5F101AC, R5F101AB, R5F101AC, R5F101AB, R5F101AB, R5F101AB, R5F101AF, R5F101AC, R5F101AF, R5F101AB, R5F101A
G13	R5F101EE, R5F101EF, R5F101EG, R5F101EH, R5F101FA, R5F101FC, R5F101FD, R5F101FE, R5F101FF, R5F101FG, R5F101FH, R5F101FJ, R5F101FA, R5F101FC, R5F101FD, R5F101GC, R5F101GD, R5F101GE, R5F101GF, R5F101GG, R5F101GH, R5F101GJ, R5F101GK, R5F101GL, R5F101JC, R5F101JD, R5F101JE, R5F101JF, R5F101JG, R5F101JH, R5F101JJ, R5F101JK, R5F101JL, R5F101LC, R5F101LD, R5F101LE, R5F101LF, R5F101LG, R5F101LH, R5F101LJ, R5F101LK, R5F101LL, R5F101MF, R5F101MG, R5F101MH, R5F101MJ, R5F101MK, R5F101ML, R5F101PF, R5F101PG, R5F101PH, R5F101PJ, R5F101PK, R5F101PL, R5F101SH, R5F101SJ, R5F101SK, R5F101SL
	R5F104AA, R5F104AC, R5F104AD, R5F104AE, R5F104AF, R5F104AG, R5F104BA, R5F104BC, R5F104BD, R5F104BE, R5F104BF, R5F104BG, R5F104CA, R5F104CC, R5F104CD, R5F104CE, R5F104CF, R5F104CG, R5F104EA, R5F104EC, R5F104ED, R5F104EE, R5F104EF, R5F104EG, R5F104EH, R5F104FA, R5F104FC, R5F104FD, R5F104FE, R5F104FF, R5F104FG, R5F104FJ, R5F104FJ, R5F104GA, R5F104GC, R5F104GD, R5F104GE, R5F104GF, R5F104GG, R5F104GH, R5F104GJ, R5F104GK, R5F104GL, R5F104JC, R5F104JD, R5F104JE, R5F104JF, R5F104JG, R5F104JJ, R5F104JL, R5F104JC, R5F104JD, R5F104JE, R5F104JF, R5F104JG, R5F104JJ, R5F104JL, R5F104JC, R5F104JD, R5F104JE, R5F104JG, R5F104JG, R5F104JJ, R5F104JJ, R5F104JC, R5F104LE, R5F104LF, R5F104LG, R5F104JH, R5F104JJ, R5F104JJ, R5F104JC, R5F104JD, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104JJ, R5F104JC, R5F104JE, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104JF, R5F104JF, R5F104JE, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104JF, R5F104JF, R5F104JF, R5F104JF, R5F104FF, R5F104
G14 G1A	R5F104PH, R5F104PJ, R5F104PK, R5F104PL R5F10E8A, R5F10E8C, R5F10E8D, R5F10E8E, R5F10EBA, R5F10EBC, R5F10EBD, R5F10EBE, R5F10EGA, R5F10EGC, R5F10EGD, R5F10EGE, R5F10ELC, R5F10ELD, R5F10ELE
G1C	R5F10JBC, R5F10JGC, R5F10KBC, R5F10KGC
 G1D	
 G1E	R5F11AGG, R5F11AGH, R5F11AGJ R5F10FLC, R5F10FLD, R5F10FLE, R5F10FMC, R5F10FMD, R5F10FME
G1F	R5F11B7C, R5F11B7E, R5F11BBC, R5F11BBE, R5F11BCC, R5F11BCE, R5F11BGC, R5F11BGE, R5F11BLC, R5F11BLE
 G1G	R5F11EA8, R5F11EAA, R5F11EB8, R5F11EBA, R5F11EF8, R5F11EFA
I1A	R5F1076C, R5F107AC, R5F107AE, R5F107DE
I1B	R5F10MME, R5F10MMG, R5F10MPE, R5F10MPG
I1D	R5F11768, R5F1176A, R5F11778, R5F1177A, R5F117A8, R5F117AA, R5F117AC, R5F117BA, R5F117BC, R5F117GA, R5F117GC
I1E	R5F11CBC, R5F11CCC
L12	R5F10RB8, R5F10RBA, R5F10RBC, R5F10RF8, R5F10RFA, R5F10RFC, R5F10RG8, R5F10RGA, R5F10RGC, R5F10RJ8, R5F10RJA, R5F10RJC, R5F10RLA, R5F10RLC
L13	R5F10WLA, R5F10WLC, R5F10WLD, R5F10WLE, R5F10WLF, R5F10WLG, R5F10WMA, R5F10WMC, R5F10WMD, R5F10WME, R5F10WMF, R5F10WMG

	L1C	R5F110ME, R5F110MF, R5F110MG, R5F110MH, R5F110MJ, R5F110NE, R5F110NF, R5F110NG, R5F110NH, R5F110NJ, R5F110PE, R5F110PF, R5F110PG, R5F110PH, R5F110PJ, R5F111ME, R5F111MF, R5F111MG, R5F111MH, R5F111MJ, R5F111NE, R5F111NF, R5F111NG, R5F111NH, R5F111NJ, R5F111PE, R5F111PF, R5F111PG, R5F111PH, R5F111PJ
	110	R5F51101, R5F51103, R5F51104, R5F51105, R5F5110H, R5F5110J
	111	R5F51111, R5F51113, R5F51114, R5F51115, R5F51116, R5F51117, R5F51118, R5F5111J
	113	R5F51135, R5F51136, R5F51137, R5F51138
	210	R5F52103, R5F52104, R5F52105, R5F52106, R5F52107, R5F52108, R5F5210A, R5F5210B
	21A	R5F521A6, R5F521A7, R5F521A8
	220	R5F52201, R5F52203, R5F52205, R5F52206
	230	R5F52305, R5F52306
	231	R5F52315, R5F52316, R5F52317, R5F52318
	23T	R5F523T3, R5F523T5
	610	R5F56104, R5F56106, R5F56107, R5F56108
	621	R5F56216, R5F56217, R5F56218
	62G	R5F562G7, R5F562GA
	62N	R5F562N7, R5F562N8
	62T	R5F562T6, R5F562T7, R5F562TA
	630	R5F56307, R5F56308, R5F5630A, R5F5630B, R5F5630D, R5F5630E
		R5F56316, R5F56317, R5F56318, R5F5631A, R5F5631B, R5F5631D, R5F5631E, R5F5631F, R5F5631G, R5F5631J, R5F5631K, R5F5631M, R5F5631N, R5F5631P, R5F5631W, R5F5631Y, R5S56310
	631	R5F5631MF, R5F5631PF,(Debug Support Only)
		R5F5634B, R5F5634D, R5F5634E
	634	R5F5634B_5V, R5F5634D_5V, R5F5634EW, R5F5634E_5V, (Debug Support Only)
	63N	R5F563NA, R5F563NB, R5F563ND, R5F563NE, R5F563NF, R5F563NK, R5F563NW, R5F563NY
		R5F563T4, R5F563T5, R5F563T6, R5F563TB, R5F563TC, R5F563TE
	63T	R5F563TB_5V, R5F563TC_5V, R5F563TE_5V,(Debug Support Only)
	64M	R5F564MF, R5F564MG, R5F564MJ, R5F564ML
RX	71M	R5F571MF, R5F571MG, R5F571MJ, R5F571ML
		R7S72100, R7S721001, R7S72101, R7S72102
	A1	R7S721001_DualSPI, R7S721020, R7S721020_DualSPI, R7S721021, R7S721021_DualSPI,(Debug Support Only)
RZ	T1	R7S910001, R7S910002, R7S910006, R7S910007, R7S910011, R7S910013, R7S910015, R7S910015_M3, R7S910016, R7S910016_M3, R7S910017, R7S910017_M3, R7S910018, R7S910018_M3, R7S910101, R7S910102, R7S910106, R7S910107, R7S910111, R7S910113, R7S910115, R7S910115_M3, R7S910116, R7S910116_M3, R7S910117, R7S910117_M3, R7S910118, R7S910118_M3

		CUSTOM_DEVICE_1, SH-2A_C_1C3A_3, SH-2A_C_1C3A_4, SH-2A_C_1C3A_5, SH- 2A_C_1C3A_6, SH-2A_C_1C3A_F, SH-2_CUSTOM_MCU, SH2A_CUSTOM_MCU1, SH2A_CUSTOM_SOC_1, SH2A_CUSTOM_SOC_2, SH2A_CUSTOM_SOC_3, SH2A_CUSTOM_SOC_4, SH2A_CUSTOM_SOC_5, SH70835A, SH70835R, SH70845A, SH70845R, SH70855A, SH70855R, SH70865R, SH71243, SH71253, SH71464R, SH71494A, SH71494R, SH7214, SH72145AD, SH72145BD, SH72146AD, SH72146BD, SH72147AD, SH72147BD, SH7215, SH72165BD, SH72166AD, SH72166BD, SH72167AD, SH72167AD_Option, SH72167BD, SH72265, SH72266, SH72267, SH72275, SH72276, SH72277, SH72314L, SH72315A, SH72315L, SH72374A, SH72374B, SH72375B, SH72394A, SH72395A, SH72395B, SH72531, SH72631, SH72631, SH72632, SH72622, SH72623, SH72624, SH72625, SH72626, SH7264, SH72631, SH72632, SH72633, SH72641, SH72643, SH72643, SH72644, SH72645, SH72646, SH72647, SH72660, SH72661, SH72662, SH72663, SH72670, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH72613A, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH72663, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH72613A, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH72663, SH72670, SH72672, SH72673, SH72670, SH72681, SH72691, SH72691, SH7606, SH72663, SH72670, SH72672, SH72673, SH72673, SH72680, SH72681, SH72691, SH7606, SH72663, SH72671, SH72672, SH72673, SH72680, SH72681, SH72691, SH7606, SH7618A, SH7671, SH7672, SH7673,(Debug Support Only)
	SH2	SH7047F, SH70834A, SH70844A, SH70854A, SH70865A, SH71242, SH71252, SH7144F, SH7145F, SH71464A, SH71491R, SH7615, SH7616, SH7618, SH7619
	SH2A-FPU	SH72394B
	SH2a	SH7201, SH7203, SH72165AD, SH72546RFCC, SH72611, SH72620, SH72630, SH72640, SH72690, SH7670
SH	SH2a (No FPU)	SH7206, SH7211, SH7243, SH7285, SH7286



2. Code Generator Support

CPU	Family	Devices
	F12	R5F10968, R5F1096A, R5F1096B, R5F1096C, R5F1096D, R5F1096E, R5F109AA, R5F109AB, R5F109AC, R5F109AD, R5F109AE, R5F109BA, R5F109BB, R5F109BC, R5F109BD, R5F109BE, R5F109GA, R5F109GB, R5F109GC, R5F109GD, R5F109GE, R5F109LA, R5F109LB, R5F109LC, R5F109LD, R5F109LE
	F13	R5F10A6A, R5F10A6C, R5F10A6D, R5F10A6E, R5F10AAA, R5F10AAC, R5F10AAD, R5F10AAE, R5F10ABA, R5F10ABC, R5F10ABD, R5F10ABE, R5F10AGA, R5F10AGC, R5F10AGD, R5F10AGE, R5F10AGF, R5F10AGG, R5F10ALC, R5F10ALD, R5F10ALE, R5F10ALF, R5F10ALG, R5F10AME, R5F10AMF, R5F10AMG, R5F10BAC, R5F10BAD, R5F10BAE, R5F10BAF, R5F10BAG, R5F10BBC, R5F10BBD, R5F10BBE, R5F10BBF, R5F10BBG, R5F10BGC, R5F10BGD, R5F10BGE, R5F10BGF, R5F10BGG, R5F10BLC, R5F10BLD, R5F10BLE, R5F10BLF, R5F10BLG, R5F10BME, R5F10BMF, R5F10BMG
	F14	R5F10PAD, R5F10PAE, R5F10PBD, R5F10PBE, R5F10PGD, R5F10PGE, R5F10PGF, R5F10PGG, R5F10PGH, R5F10PGJ, R5F10PLE, R5F10PLF, R5F10PLG, R5F10PLH, R5F10PLJ, R5F10PME, R5F10PMF, R5F10PMG, R5F10PMH, R5F10PMJ, R5F10PPE, R5F10PPF, R5F10PPG, R5F10PPH, R5F10PPJ
	F15	R5F113GK, R5F113GL, R5F113LK, R5F113LL, R5F113MK, R5F113ML, R5F113PG, R5F113PH, R5F113PJ, R5F113PK, R5F113PL, R5F113TG, R5F113TH, R5F113TJ, R5F113TK, R5F113TL
	G10	R5F10Y14, R5F10Y16, R5F10Y17, R5F10Y44, R5F10Y46, R5F10Y47
	G12	R5F10266, R5F10267, R5F10268, R5F10269, R5F1026A, R5F10277, R5F10278, R5F10279, R5F1027A, R5F102A7, R5F102A8, R5F102A9, R5F102AA, R5F10366, R5F10367, R5F10368, R5F10369, R5F1036A, R5F10377, R5F10378, R5F10379, R5F1037A, R5F103A7, R5F103A8, R5F103A9, R5F103AA
		R5F1006A, R5F1006C, R5F1006D, R5F1006E, R5F1007A, R5F1007C, R5F1007D, R5F1007E, R5F1008A, R5F1008C, R5F1008D, R5F1008E, R5F100AC, R5F100AD, R5F100AE, R5F100AF, R5F100AG, R5F100BA, R5F100BC, R5F100BD, R5F100BF, R5F100BF, R5F100BG, R5F100CA, R5F100CD, R5F100CD, R5F100CF, R5F100CG, R5F100EA, R5F100EC, R5F100ED, R5F100EE, R5F100FF, R5F100FG, R5F100FJ, R5F100FA, R5F100FC, R5F100GA, R5F100GC, R5F100GD, R5F100FG, R5F100FH, R5F100FJ, R5F100FA, R5F100FL, R5F100GA, R5F100GC, R5F100GD, R5F100JG, R5F100JG, R5F100JF, R5F100JF, R5F100GA, R5F100GK, R5F100GD, R5F100JC, R5F100JD, R5F100JF, R5F100JF, R5F100GJ, R5F100JJ, R5F100JL, R5F100JC, R5F100JD, R5F100JF, R5F100JF, R5F100JJ, R5F100JJ, R5F100JL, R5F100JC, R5F100JD, R5F100JF, R5F100JF, R5F100JJ, R5F100JJ, R5F100JL, R5F100JC, R5F100DH, R5F100DJ, R5F100JF, R5F100JJ, R5F100JJ, R5F100JL, R5F100JC, R5F100DH, R5F100DJ, R5F100H, R5F100JL, R5F100SH, R5F100JL, R5F100FF, R5F101FA, R5F101AA, R5F100FK, R5F1016E, R5F1017A, R5F1017C, R5F1017D, R5F1017E, R5F1016A, R5F1016C, R5F1018D, R5F1018E, R5F101AA, R5F101AC, R5F101AD, R5F101AE, R5F101AA, R5F101BC, R5F101BC, R5F101BD, R5F101BE, R5F101BF, R5F101AE, R5F101AA, R5F101AG, R5F101BA, R5F101BC, R5F1011BD, R5F101BE, R5F101BF, R5F101FA, R5F1011CA, R5F101AG, R5F101BC, R5F1011GG, R5F1011FJ, R5F101FA, R5F1011FD, R5F1011GA, R5F1011EL, R5F1011FG, R5F1011FJ, R5F101FA, R5F1011FD, R5F1011GA, R5F1011GD, R5F1011GE, R5F1011FJ, R5F101FA, R5F1011FD, R5F1011GA, R5F1011GD, R5F1011GE, R5F1011FJ, R5F1011FA, R5F1011FD, R5F1011GA, R5F1011GD, R5F1011GE, R5F1011FJ, R5F1011FA, R5F1011FD, R5F1011GA, R5F1011GD, R5F1011GE, R5F1011GF, R5F1011FA, R5F1011GJ, R5F1011GA, R5F1011GJ, R5F1011JC, R5F1011JD, R5F1011JE, R5F1011JF, R5F1011JG, R5F1011JJ, R5F1011JL, R5F1011JC, R5F1011JD, R5F1011JE, R5F1011JF, R5F1011JG, R5F1011JH, R5F1011JL, R5F1011LC, R5F1011FA, R5F1011JF, R5F10
RL78	G13	R5F101SJ, R5F101SK, R5F101SL

	G14	R5F104AA, R5F104AC, R5F104AD, R5F104AE, R5F104AF, R5F104AG, R5F104BA, R5F104BC, R5F104BD, R5F104BE, R5F104BF, R5F104BG, R5F104CA, R5F104CC, R5F104CD, R5F104CE, R5F104CF, R5F104CG, R5F104EA, R5F104EC, R5F104ED, R5F104EE, R5F104EF, R5F104EG, R5F104EH, R5F104FA, R5F104FC, R5F104FD, R5F104FE, R5F104FF, R5F104FG, R5F104FH, R5F104FJ, R5F104GA, R5F104GC, R5F104GD, R5F104GE, R5F104GF, R5F104GG, R5F104GH, R5F104GJ, R5F104GC, R5F104GL, R5F104JC, R5F104JD, R5F104JE, R5F104JF, R5F104JG, R5F104JH, R5F104JJ, R5F104LC, R5F104LD, R5F104JD, R5F104LF, R5F104JF, R5F104JG, R5F104JJ, R5F104LJ, R5F104LC, R5F104LD, R5F104MG, R5F104HF, R5F104HA, R5F104LH, R5F104LJ, R5F104LK, R5F104LL, R5F104MF, R5F104PH, R5F104PJ, R5F104PK, R5F104PL R5F10EBA, R5F10EBC, R5F10EBD, R5F10EBA, R5F10EBC, R5F10EBD, R5F10EBE, R5F10EGA, R5F10EGC, R5F10EGD, R5F10EGE, R5F10ELC, R5F10ELD,
	G1A	R5F10ELE
	G1C	R5F10JBC, R5F10JGC, R5F10KBC, R5F10KGC
	G1D	R5F11AGG, R5F11AGH, R5F11AGJ
	G1E	R5F10FLC, R5F10FLD, R5F10FLE, R5F10FMC, R5F10FMD, R5F10FME
	G1F	R5F11B7C, R5F11B7E, R5F11BBC, R5F11BBE, R5F11BCC, R5F11BCE, R5F11BGC, R5F11BGE, R5F11BLC, R5F11BLE
	G1G	R5F11EA8, R5F11EAA, R5F11EB8, R5F11EBA, R5F11EF8, R5F11EFA
	I1A	R5F1076C, R5F107AC, R5F107AE, R5F107DE
	I1B	R5F10MME, R5F10MMG, R5F10MPE, R5F10MPG
	I1D	R5F11768, R5F1176A, R5F11778, R5F1177A, R5F117A8, R5F117AA, R5F117AC, R5F117BA, R5F117BC, R5F117GA, R5F117GC
	I1E	R5F11CBC, R5F11CCC
	L12	R5F10RB8, R5F10RBA, R5F10RBC, R5F10RF8, R5F10RFA, R5F10RFC, R5F10RG8, R5F10RGA, R5F10RGC, R5F10RJ8, R5F10RJA, R5F10RJC, R5F10RLA, R5F10RLC
	L13	R5F10WLA, R5F10WLC, R5F10WLD, R5F10WLE, R5F10WLF, R5F10WLG, R5F10WMA, R5F10WMC, R5F10WMD, R5F10WME, R5F10WMF, R5F10WMG
	L1C	R5F110ME, R5F110MF, R5F110MG, R5F110MH, R5F110MJ, R5F110PE, R5F110PF, R5F110PG, R5F110PH, R5F110PJ, R5F111ME, R5F111MF, R5F111MG, R5F111MH, R5F111MJ, R5F111PE, R5F111PF, R5F111PG, R5F111PH, R5F111PJ
	110	R5F51101, R5F51103, R5F51104, R5F51105, R5F5110H, R5F5110J
	111	R5F51111, R5F51113, R5F51114, R5F51115, R5F51116, R5F51117, R5F51118, R5F5111J
	113	R5F51135, R5F51136, R5F51137, R5F51138
	230	R5F52305, R5F52306
	231	R5F52315, R5F52316, R5F52317, R5F52318
	23T	R5F523T3, R5F523T5
	64M	R5F564MF, R5F564MG, R5F564MJ, R5F564ML
RX	71M	R5F571MF, R5F571MG, R5F571MJ, R5F571ML
RZ	T1	R7S910001, R7S910002, R7S910006, R7S910007, R7S910011, R7S910013, R7S910015, R7S910016, R7S910017, R7S910018, R7S910101, R7S910102, R7S910106, R7S910107, R7S910111, R7S910113, R7S910115, R7S910116, R7S910117, R7S910118

4. Current Smart Manual support

Smart manual support is delivered independently of e² studio releases when available. The following devices are available as of the 21st of September, 2015:

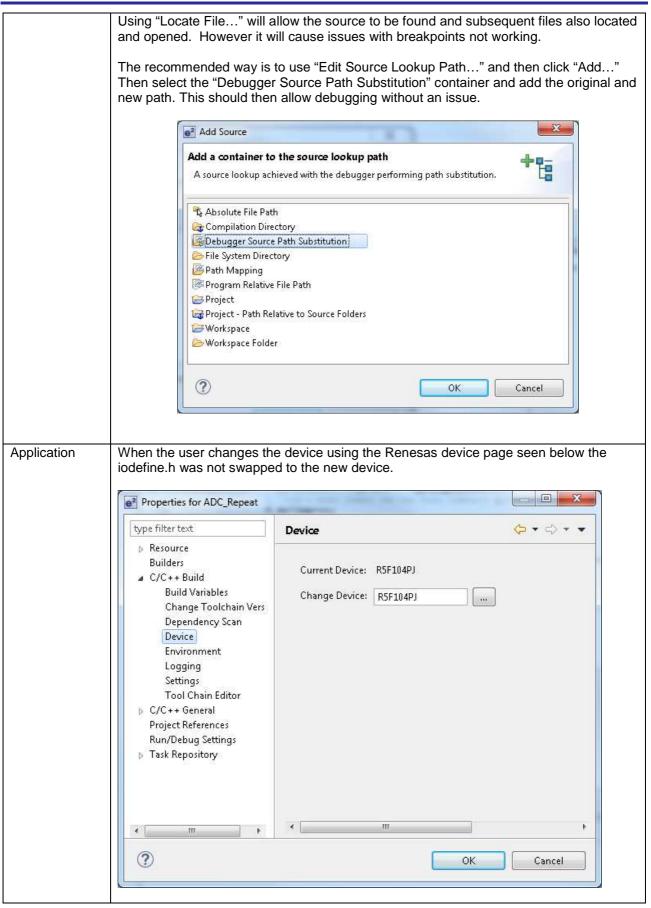
- RX62G
- RX62T
- RX63N
- RX63T
- RX64M
- RX71M
- RX110
- RX111
- RX113
- RX210
- RX220
- RX631

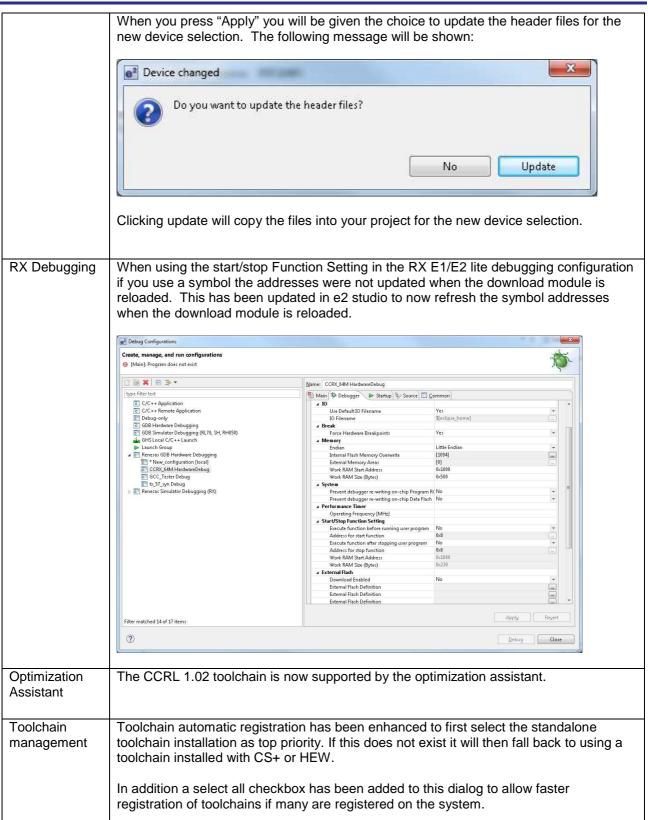


5. What is new in 4.1.0?

	Description					
RZ Debugging	Full RZ/T1 multicore debugging has been added.					
	To use this feature you should dialog. To create a multicore debug se each core that is to be connect	ession first create the individu	Ū.	0		
	Then open the debug configura group to contain the previously		/ Launch G	roup, editing the		
	The start order for the sessions the cores are connected. The la normal session from the Debug	aunch group can then be sta				
RL78 debugging	The RL78 device family has no	ow had E2 Lite debugging ad	ded to its d	lebug support.		
		Name: New_configuration				
	type filter text	Main 🌮 Debugger 🕨 Startup 🦆 Source 🔲	Common			
	C C/C++ Application C C/C++ Remote Application C Debug-only	Debug hardware: E2 Lite (RL78)	ice: R5F1006A			
	 GDB Hardware Debugging GDB Simulator Debugging (RL78, SH, RH850) 	GDB Settings Connection Settings Debug Tool Set	tings			
	a GHS Local C/C++ Launch ▶ Launch Group	Use Default IO Filename IO Filename	Yes \${eclipse_home}			
	Renesas GDB Hardware Debugging * New_configuration [local]	# Break				
	CCRX_64M HardwareDebug	Force Hardware Breakpoints Stop emulation of timer group when stopping	Yes			
	CC_Tester Debug c™tc_57_syn Debug	Stop emulation of serial group when stopping		-		
	 C (C) (S) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Mask For Input Signal Mask Target Reset Signal	No			
			No			
		Mask Internal Reset Signal	140			
		⊿ Memory				
			Yes			
		Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program	Yes 1 No			
		Memory Verify On Writing To Memory Start/Stop Function Setting	Yes No 0x0			
		Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function	Yes No 0x0			
		A Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program	Yes No 0x0 No			
	Filter matched 14 of 17 items	A Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program	Yes No 0x0 No			
	Filter matched 14 of 17 items	A Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program	Yes No 0x0 No	•		
Improved FIT		Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program Address for stop function	Yes No 0x0 No	Apply Reget		
	0	Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program Address for stop function	Yes No 0x0 No	Apply Reget		
mproved FIT configurator	Various improvements made to	Advess for stop function Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program Address for stop function the FIT configurator:	Yes No 0x0 0x0	Apply Reyett		
	 Various improvements made to It is now possible to se 	• Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Erecute function after stopping user program Address for stop function	Yes No 0:00 0:00 stage that	Apply Reyert Rebug Close		
	 Various improvements made to It is now possible to se 	Advess for stop function Start/Stop Function Setting Execute function before running user program Address for start function Execute function after stopping user program Address for stop function the FIT configurator:	Yes No 0x0 0x0 0x0 stage that	Apply Reyert Rebug Close		
	 Various improvements made to It is now possible to se 	• Memory Verify On Writing To Memory Start/Stop Function Setting Execute function before running user program Address for start function Erecute function after stopping user program Address for stop function	Yes No 0x0 0x0 0x0 stage that	Apply Reyert Rebug Close		

	(In the second sec	C Project		1
		e2 studio - Project Generation		
		Code Generator and FIT Settings		
	-	🔲 Use Peripheral code Generator		
		Use FIT module	ules	
		The e2 studio peripheral code generator auto	omatically generates programs (device drivers) for MCU	
		settings entered via a graphical user interface interfaces (APIs) and are not limited to initial	erfaces, A/D converters, DMA controllers, etc.) based on e (GUI). Functions are provided as application programming ization of peripheral functions.	
		Conventionally, the information "CMCU initi configuration", "Names of functions", "Com	ial settings", "How to define a target board", "File mon interface with user application" etc; has in many cases o be made to sample code when embedding into a user	
		application. With FIT, there are rules for this i user application with ease. Also, the peripher	information, so each sample code can be embedded into a al function drivers and middleware which support FIT have	
		a common interface with user applications. between RX microcontrollers.	This makes it easy to port user applications when migrating	
		User	Application	
			Middleware	
		CG	RTOS	
		Device Driver	Device Driver (BSP)	
			MCU	
		L		
		? < <u>B</u> ac	:k Next > Einish Cancel	
			s it is possible for the pir	n setting to be
	automatically c	configured.		
	 If a library is ne 	eded by the FIT m	odule being added to the	e project this library is
	now automatic	ally added.		
	 Uninstalling FI 	T modules is now s	upported.	
	-		lity is now provided for F	X71M and RX64M
	-			
			ble resource conflicts bet	
			the product. This feature	
			ature. Please consult the	release notes for the
		ou have downloade		
Application			de in previous versions o	of e2 studio could
	often not be relocated	without rebuilding th	ne application.	
	This has now been imp	way and Whan the a	ource cannot be found t	ha fallowing nago ia
	shown in place of the s			he following page is
	S r_reset_program.asm	r_main.c 🔀 Icd.c	PowerON_Reset() at r_reset_prog	ram.asm:65 0 🔀 🗖 🗖
	1			
	\HardwareDebug//src/r_reset_p		nts\e2_studio\workspace\ADC_Repe	at
	Locate the file or edit the source		cation.	
	View Disassembly			
	Locate File			
	Edit Source Lookup Path			
	<u></u>			





Raw Image Memory Renderer	image. Please note the	"Start Position" of	option on the Raw Im	
	e	Raw Image Form	nat 📒	X
		Dimensions		
		Width:		
		Height:		
		Encoding		
		Monochrome		44.5
		🔘 RGB:	32bpp (8:8:8:8)	
		🔘 BGR:	32bpp (8:8:8:8)	· •
		🔘 YCbCr:	24bpp (4:4:4 chunky)	-
	1	Start Position		
		💿 Тор		
		🔘 Bottom		
		?	K Cancel	

CC-RL build	The following options are now available in the CC-RL user interface:
support	Compiler
	-asmopt=-mirror_region
	-U
	-far_rom
	-dbl_size
	-signed_char
	-signed_bitfield -switch
	-volatile
	-merge_string
	-pack
	-ansi
	-refs_without_declaration
	-large_variable -nest_comment
	-misra2004
	-ignore_files_misra
	-check_language_extension
	Assembler:
	-asmopt=-mirror_region
	Linker:
	-DEFine
	-PADDING -VECT
	-VECT
	-SEction_forbid
	-Absolute_forbid
	-FSymbol
	-CPu
	-MEMory -Hide
	Librarian:
	-MEMory
	-Hide
	Converter -RECord
	-SPace
	-BYte_count
	-CRc
	-S9
CC-RX build	The following options are now available in the CC-RX user interface:
support	
	Compiler:
	-undefine
	-check
	-misra2004 -ignore_files_misra
	-check_language_extension
	-nouse_pid_register
	-utf8
	-outcode
1	

	Assembler:
	-nouse_pid_register
	-utf8
	Linker: -vectn -vect -jump_entries_for_pic -samesize -symbol_forbid -samecode_forbid section_forbid -absolute_forbid -compress -nocompress
	-memory
	-hide
	Library Generator: -nouse_pid_register -nofloat -simple_studio
	Librarian:
	-memory
	-hide
	Converter
	-space
	-byte_count
	-crc
	-\$9
Memory Usage Plugin	The memory usage plugin now supports the CC-RX and CC-RL library project types.



6. Useful workarounds and information for 4.1

ID	Component	Workaround or information
	Application	This version of e ² studio is based on Eclipse Luna SR2 and CDT 8.6. This release note does not describe the Eclipse framework and CDT plugin issues and fixes. You can find the detailed information on the sites below:
		For information on the Luna release see here: https://projects.eclipse.org/releases/luna http://archive.eclipse.org/eclipse/downloads/drops4/R-4.4-201406061215/news/
		CDT: <u>https://wiki.eclipse.org/CDT/User/NewIn86</u> The Eclipse bug tracker is here: <u>https://bugs.eclipse.org/bugs/</u>
		The bug list for Luna is available using the following query: https://bugs.eclipse.org/bugs/buglist.cgi?bug_status=RESOLVED&bug_status=V ERIFIED&bug_status=CLOSED&classification=Eclipse&list_id=12238007∏ uct=Platform&query_format=advanced&resolution=FIXED⌖_milestone=4.4 ⌖_milestone=4.4%20M1⌖_milestone=4.4%20M2⌖_milestone= 4.4%20M3⌖_milestone=4.4%20M4⌖_milestone=4.4%20M5⌖_milestone=4.4%20M5⌖_milestone=4.4%20M7⌖_milestone
		Bug List for CDT is: https://bugs.eclipse.org/bugs/buglist.cgi?bug_status=RESOLVED&bug_status=V ERIFIED&bug_status=CLOSED&classification=Tools&list_id=12238014&produc t=CDT&query_format=advanced&resolution=FIXED⌖_milestone=8.5&targ et_milestone=8.6.0
5954	Application	If you experience the error message "org.eclipse.swt.SWTError: No more handles" this can be caused by certain multi-monitor software and the Eclipse framework.
		If this error occurs there are 2 workarounds:
		 Use a single monitor display. Uninstall the multiple monitor software from your graphics chipset vendor and revert to the standard Windows multi-monitor feature.
6981	RL78 Debugging	When debugging IAR C source file with an OCD emulator (E1), the Monitor program area (0x00002-0x00003) is used.
		So this area must be excluded from usable address space. Please add '-HFF' in the linker option.
		- Open Property.
		- Select [C/C++ build]-[Settings] at left side.
		- Select 'IAR RL78 Xlink linker' at right side, add '-HFF' at the textbox 'command'.

		Not doing this will cause problems with connection and download when using interrupts.
NA	Application	If you are experiencing slow building of projects within e ² studio there are some possibilities to improve.
		The system environment will attempt to find the make.exe tool via the system environment. If you ensure the directory make resides in is at the start of the path variable it will find it more quickly. Especially important if there are network drives in the path.
		In the project properties, C/C++ Build tab, behavior tab you can switch on parallel build. This will take advantage of the multi-cores on your host machine if it has them. In e^2 studio 2.1 or later this now defaults to on for new projects.
NA	RZ GCC	In 3.0 the KPIT GCC RZ toolchain was support at version 14.01. This version is no longer supported within e^2 studio.
		KPIT have modified the name of their ARM toolchain to be ARM-none-eabi to follow standard ARM naming convention like other GCC toolchain vendors.
		The toolchain is available at version 14.01 and 14.02 from the KPIT website. The binaries in the 14.01 version is identical to that used in the 14.01 RZ toolchain.
		Once the toolchain is installed your projects will be imported and ported to ensure there is as little disruption as possible due to this change.
NA	GCC Build Plugin	The GNU toolchain linker file format was changed in 3.0. This means projects that are developed in 3.0 or later and opened in 2.x will still continue to build. However you may experience issues visiting the GCC Linker Sections user interface.
5041	Code Generator	Code Generator can delete user code between /* Start */ End comments in some situations. Using the code generator if the following code is placed in the main function:
		//if(data_in!=0xAA){
		On a line by itself, all of the main code will be removed when Generate Code button is pressed.
		The key issue is that the {brace is on the same line as the comment.
2010	HEW	Symptoms: Project fails to build after import from HEW
	Importer	Conditions: If a long filename or path is used, and the HEW project importer is used, the project may fail to build.
		Workaround: Move the original HEW project to a shallow directory structure (i.e.) C:\Workspace and import from there. Also ensure that the HEW project is relocated before importing into e ² studio.
2421	Debug Configuration s	Debug configurations have been modified since e ² studio 2.x. So although you can re-use the workspace and projects from e ² studio 1.x when you open the debug launch configuration for the first time it is updated.
		Before doing this you should back-up the .launch file if you need to keep a 1.x version.
NA	Application	It is not possible to import e^2 studio 1.x projects which are for the V850 device into e^2 studio 2.0.

1922	Application	Symptoms: Project fails to build in first instance after archive project import (not from HEW)
		Conditions: If an archived project is imported it may fail to build the first time, due to a residual .d file.
		Workaround: Clean and Build a second time.
2762	CODAN	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully.
		We do not have a workaround for this at this time.
		On occasion you may also see this for C source files. This is normally a case of the indexer needing to be refreshed.
		Right click on the project, select Index->Freshen all files. Then right click again select Index-Rebuild. This should solve unexpected CODAN errors in C source files.
2728	GDB	Step into does not always work when using the CCRX 1.02.01 toolchain.
		To ensure this behaves correctly you will need to use CCRX 2.00.00 or greater as this issue with the debug information is corrected in this release.
NA	Eventpoints	If eventpoints do not always work just after they are set, you can use the "Apply to Target" toolbar button in the Eventpoint view to send the Eventpoints to the target manually. This will always ensure the debugger target has all the required eventpoint updates before execution starts.
5772	IAR Plugins	The IAR Plugin Manager is now included in e ² studio. This provides support for RX, RL78, RH850 and RZ (ARM).
		This is a tool which simplifies installation and configuration of IAR toolchain plugins. You can access this though Help -> IAR Embedded Workbench plugin manager.
5903	Code Generator	For the following RL78 code generator project, "Peripheral Functions" view tabs may not be operated with double-clicking "Peripheral Functions" branch of Project Explorer view.
		After creating/loading the project, please show "Code Preview" view by double- clicking of "Code preview" branch at Project Explorer tree at first. Then, please access Code Generator setting tabs by double-clicking Project Explorer tree or using pull-down menu by pressing triangle button at the up-right corner of Peripheral Functions view.
		RL78/G12, RL78/G13, RL78/G14, RL78/G1A, RL78/I1A, RL78/F13, RL78/F14, RL78/F12, RL78/L12
6184	RL78/CCRL debugging	When the load module for RL78/G10 which created at CC-RL is debugged in E1, please specify the following option:
		[Linker] -> [Device] -> "Set enable/disable on-chip debug by link option
5995	CCRX to GNU RX Converter	When converting from CCRX to GCC projects some comments like //* comment */ are left intact which will result in an error if standard is set to C89. Changing the standard to C99 or above will fix this problem.
l	1	1

7217	Application	The restore default settings does not restore all of the options set during project generation. Instead it sets the defaults to the base settings for the device family in use.
7524	RZ/T1 Debugging	In a RZ/T1 RAM-based project, the "Reload" function does not work. Reloading or re-downloading during debugging resets the device and the RAM content is erased. To continue the debugging, disconnect and connect the debugger again.

7. Fixed issues in 4.1.0.18

ID	Component	Description
3470	Application	When debugging with the RX210 the FPSW register is displayed on the register view. This should not be the case as the RX210 does not have the FPSW register.
		When debugging a project that has been imported but that has not been rebuilt you need to setup the debugger to look in the original source file location.
4422	Application	This is done via the Source tab of the Debug Configurations dialog.
4579	RX GCC build plugin	All configuration changes are not saved on changing multiple configuration settings in one session for GCC tools. Specifically this is referring to multiple settings changes across multiple configurations and the clicking apply.
5063	Application	Dependency scanning is not working for assembler file. This is for GCC build plugins.
5110	GDB	For some RX devices the default display of PSW the IPL is displayed wrong. The MSB is not shown.
5530	Application	Indexer settings are not persisted on a project import into e2 studio.
		For the following RL78 code generator project, "Peripheral Functions" view tabs may not be operated with double-clicking "Peripheral Functions" branch of Project Explorer view.
		After creating/loading the project, please show "Code Preview" view by double-clicking of "Code preview" branch at Project Explorer tree at first. Then, please access Code Generator setting tabs by double-clicking Project Explorer tree or using pull-down menu by pressing triangle button at the up-right corner of Peripheral Functions view.
5903	Code Generator plugin	RL78/G12, RL78/G13, RL78/G14, RL78/G1A, RL78/I1A, RL78/F13, RL78/F14, RL78/F12, RL78/L12
6336	Application	Start / Stop Function Settings are sent once on connecting. If the address for start function or stop function is changed by building the program, please disconnect from target and reconnect again.
6525	Trace plugin	The Trace View does not show disassembly when tracing through code in a memory area not in the download module.
6534	Application	CCRL toolchain with the GDB Simulator: addresses are not shown in source view.
		1.
		Due to the optimization of the compiler, the static function is not sometimes indicated in Static Analysis View.
		In this case, please select "Debug Precedence" in "Level of optimization".
		2.
		The label indication of static function is different between CC-RX and CC-RL.
		This difference is due to CCRL and CCRL Compiler spec.
		<example></example>
		<pre>static int function01(int a) {}</pre>
		CC-RX: function01
		CC-RL: fucntion01@1
6594	Static Analysis plugin	In case of CC-RL, "@1" string is added to the function label.
<u> </u>		When the coverage setting is loaded from the workspace, the setting may not be affected.
6659	Coverage plugin	In such a case, please disable the coverage and enable it again.
		Code Generator doesn't have the property to change the encoding (character code).
6674	Code Generator plugin	Code Generator loads/saves the generated source file according to the default encoding of Windows.

		Therefore, when the comment with the different encoding from the Windows default one is added into the generated file by Code generator, it is not properly encoded and it cannot be displayed properly at the editor.
6685	Installer	Modify for standalone installer does not remember proxy settings.
6705	GDB Server RZ	Automatically selecting a connected JLink debugger from the debug configuration does not work correctly. The user is still required to manually select from the JLink dialog.
		When changing the "On-chip debug setting" to "Used" for GNU RL78 devices, after clicking Generate code the linker change is not immediately reflected in the build.
		The .ocd_ram section is not added until the user opens the linker settings and clicks Apply.
6731	Code Generator plugin	In some cases this causes a build failure.
6741	Code Generator plugin	Code Generator registration needs the administrator privileges. Please start e2 studio once after the installation using an admin account, before using Code Generator on the PC.
6770	Trace plugin	Loading saved trace data in the trace view when using the RZ/A1 device does not work and shows an error.
6800	Application	RAM execution project for RZ/T1. The program which is downloaded to RAM and executes in the RAM does not work well. e2 studio only supports the program which is downloaded to NOR flash or serial flash with the standard generated project.
6838	FIT Configurator	Pin selections will now be displayed in the [Pin Settings] table for selected FIT modules
6978	Debug Configuration	For the RX E1 emulator the default setting was changed for erasing internal flash blocks. By default the debugger is now set to not erase blocks of internal flash by default.
		Reload on RZ/T does not work well. Modify code on RZ/T project. Build. The code is download but not executed
		The old code is executed. Press reset button on the hardware and modified code is executed correctly.
6998	GDB Server RZ	
7011	Project Generation	In some cases the file list displayed in "Project Summary" dialog of the project generator does not match the actually generated files.
7072	GDB Server RZ	When CM3 debugging is started and expand register view to see "misc" register, "_ReadRegIfNecessary(): Register 32 is not marked as valid" error is shown.
		Importing a GCC project from 3.1 to 4.0 may result in differing optimization options.
7084	RL78 GCC build plugin	For imported legacy project (created in e2 studio versions lower than 4.0), users will have to re- select 'Optimization level', in the settings. Only then will options get passed as per the new best options implementation. For project created with version 4.0 or later, there would not be any issue on import.
7092	Application	When using the GNU ARM toolchain the project build fails when 'Dwarf3' option is selected.
7095	Application	CCRX to GNURX conversion fails for per file build settings in assembly source files.
7097	Debug Configuration	When using the RZ/T1, large projects may timeout when connecting for the first time. A reconnection will succeed.
		When using the RL78 GCC toolchain with a debug configuration for the simulator problems can occur with building once the code has been generated for the first time.
7101	Application	rl78-elf-ld: section .option_bytes loaded at [000000c0,000000c3] overlaps section .text loaded at [00000080,0000029b]
L		"Problem"
		If two or more source file folder (already included in C option) are deleted, its path was added to Assemble include.
		"Workaround"
7103	CCRX Build plugin	Remove the path in "include file directories" will stop the warning.
		Eclipse has a feature that allows files to be opened via the command line. This is specified in the following manner:
	Application	

		e2studio.exelauncher.openFile <absolute file="" of="" open="" path="" to=""></absolute>
		Specifying this for e2 studio would result in the specified file not being opened.
		GCC linker sections that have 2 '.' characters cannot be added in the linker section dialog in the build settings.
7171	Application	Examples such as '.rel.plt' cannot be added.
		Smart Browser supports RZ device.
		It shows document list (Manual:HW, Technical Update, Application Note).
7182	Smart Browser	Users can download documents and samples.
		[Issue]
		The following error dialog is shown right after e ² studio has been launched.
		'Smart Manual Discovery Startup' has encountered a problem. An internal error occurred during: "Smart Manual Discovery Startup".
		[Workaround]
		This error can be solved by calling e2studio.exe with -clean command line option. Here's how to call e ² studio with command line option(s):
		1. Create a shortcut of e2studio.exe at the folder e² studio installed. (e.g. C:\Renesas\e2studio\e2studio.exe)
		2. Add a command line option in the shortcut property. For example: "C:\Renesas\e2studio\e2studio.exe -clean"
		3. Launch e ² studio with the shortcut.
7183	Application	Note: Once the error has been solved, you don't need to use the shortcut.
7190	Smart Browser	The file downloading via Smart Browser cannot be interrupted if a network error occurs during the download.
7190	Smart Browser	
7190	Smart Browser	the download.
7190	Smart Browser	the download. Problem:
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation.
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options:
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610 ROM => Select register
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610 ROM => Select register Address Register => Select register
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610 ROM => Select register Address Register => Select register Standard Header Files
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610 ROM => Select register Address Register => Select register Standard Header Files Library configuration => C99
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use dynamic cast and typeid of C++ => Check Saves and restores ACC using the interrupt function => Check Global Options Settings Patch code generation => RX610 ROM => Select register Address Register => Select register Standard Header Files Library configuration => C99 When the "Restore Defaults" is clicked, these option are not output to command line.
7190	Smart Browser	the download. Problem: If some options of the following are specified during project creation. Select Additional CPU options: Denormalized number allowed as a result => Check Replace from int with short => Check Enum size is made the smallest => Check Pack structures, unions and classes => Check Use try, throw and catch of C++ => Check Use try, throw and catch of C++ => Check Global Options Settings Patch code generation => RX610 ROM => Select register Address Register => Select register Standard Header Files Library configuration => C99 When the "Restore Defaults" is clicked, these option are not output to command line. Workaround:



7245	Application	When using the KPIT GNU ARM-none toolchain if you switch to use toolchain version 15.01 the libraries being used will be modified. This is due to improved multilib support which is provided by that toolchain.
7260	Application	When deselecting the e2 studio update site from the update site list and closing e2 studio. The update site is removed. This should not happen and should remain available but unchecked.
		"Enhancement"
		The user application can use the FIT module and Code Generation function at the same time.
7269	Project Generation	In this version, this feature supports at RX64M and RX71M.
		"'Problem"'
		Build error occurs when map optimization and linkage order are specified.
7315	CCRX Build plugin	"'This issue is fixed at V.4.1.0"'
		Image and Raw Image view shows pixel by a tooltip.
7327	Image Memory Rendering	When hovering over the image with mouse cursor for some time, the information for the pixel underneath the cursor is shown as a tooltip.
		1. Cortex-M3 project is supported.
7352	Project Generation	2. QSPI boot project and RAM boot project for Cortex-R4F is supported.
7385	GDB Server RZ	The RZ/A IO Register address is not accessible by memory view.
7452	Application	When using the KPIT GNU builder support, a clean does not clean objects inside folder with space.
		"'Problem"
		(V.4.0.0 - V.4.0.2)
		Regarding the Update All Dependencies, the compiler define macro is not judged correctly at the CC-RX project in V.4.0.
7462	CCRX Build plugin	"'This issue is fixed at V.4.1.0."'
		"'Problem"'
		(V.4.0.0 - V.4.0.2)
		Build error occurs when the CC-RL project is created.
		'''Workaround'''
		Switch -auto_layout_section (Linker > Setion > Layout sections automatically) of Linker option (ON -> OFF -> ON).
7480	CCRL Build plugin	"'This issue is fixed at V.4.1.0."'
		MPU setting is changed.
		1. The region which is shared is set as non-cached area.
		2. The size of region 2 is extended and region 2 defines mirror area of data RAM and instruction RAM.
7502	Project Generation	3. Region 3 is deleted.



8. Open issues in 4.1.0.18

ID	Component	Description
5911	DS-5 importer	The current DS-5 importer in e2 studio imports KPIT GNU "Application" project types only. Other projects cannot be imported at this time.
-		Debugging with the RL78 GDB simulator with the IAR project generators is not straight forward.
		The default IAR debug configuration uses the GDB executable name "GDB".
		This launch will not work and you need to point it at "rI78-elf-gdb.exe" included in the e2 studio debugcomp directory.
		However if you have not launched a Renesas debug configuration it won't be present. On the first launch of a Renesas debug configuration for RL78 the file is uncompressed from the package zip file.
7005	Application	So to work around you need to launch a RL78 E1 session first so the GDB application for RL78 exists.
7641	Memory Usage plugin	When using the RX64M or RX71M the memory usage plugin does not display RAM and ROM values correctly.
		Regarding the CC-RL project,
		Export project does not output the following combination option correctly.
		* Specify [Linker]>[Input]>"Relocatable files, object files and library files"
7724	General Project Exporter	* Specify [Linker]>[Input]>[Advanced]>"Use custom linkage order"
1616	RX GCC build plugin	The options of a Build Configuration were not correct after specifying Multiple Configurations functionality.
2762	Application	When using assembly code within a C source file, Codan errors can be observed in the editor. Even though the project builds successfully.
4191	GDB server RX	When using Segger JLink, with the "Force Hardware Breakpoints" debug option enabled, adding more than the maximum amount of breakpoints for a device and then removing some can lead to none of the breakpoints firing. Workaround is to add a single breakpoint back in to trigger the reapply of all others.
4101		When the project has a toolchain that does not match the path for the toolchain installed on the machine problems with build can occur.
		Workaround is to delete the 'org.eclipse.cdt.core.prefs' file from .settings folder and then import the project.
4303	RL78 GCC build plugin	Alternatively you can modify the toolchain path from Properties > C/C++ Build > Environment. Modifying the toolchain path builds the project successfully.
4314	GDB Server SH	For the SH debugger the Debug Tool Settings -> Use User Stack option is not processed by the debugger. The setting is not used.
		The e2 studio debugger (GDB) does not deal correctly with this RL78 mnemonic. It uses the wrong instruction code:
4438	Application	Mnemonic: DIVWU Instruction code: (Wrong) CEFB04 (Correct) CEFB0B
		When CubeSuite+ project imports to e2 studio, Build cannot perform sometimes.
	CubeSuite+	[Workaround]
5179	importer/exporter	Please add the <root folder=""> to "C/C++ General -> Paths and Symbol -> Source Location"</root>

		If the maximum number of break points are used for RX with E1/E20 emulator, the connection or
5551	Application	the program execution may fail. In this case, please reduce the using break points.
5632	Multicore	When using multicore projects the Debug View may show an incorrect name for the second loaded module (as a duplicate of the first)
		In some cases when using the Coverage facility with the RL78 IECUBE some lines are shown as
5668	Coverage plugin	'branch' or partial coverage when they should be 100% covered.
		An invisible breakpoint is left in the project following a 'Move To Line' operation. Program
5669	Application	execution continues to halt at this location once the Move to Line operation has been performed.
		When modifying code that changes the line an already set breakpoint is located at the breakpoint
5721	CDT	is not moved according to the modification.
		PC set in the debug configuration is not set following launch for the Renesas RX and GDB RL78
5852	Application	simulators.
		NullPointerException is observed when adding a custom configuration and selecting the same
		configuration within the "Multiple Configuration' selection at the same time.
		This issue only occurs if user has not applied after creating a new configuration:
6350	Application	https://bugs.eclipse.org/bugs/show_bug.cgi?id=352047
		Additional build tabs contributed by other third party tools can be hidden by e2 studio. This is caused by Renesas/KPIT build plugins replacing the standard build settings page with a custom
6484	Application	one.
6529	CDT	After restart on occasion the disassembly window can be empty. Refreshing the window or stepping works around the problem.
		The Profile View 'Execution Time' and 'Average Execution Time' columns are showing as zero
6549	GDB server	after suspending the current debug session (for all targets).
6566	Real-time Watch	In some situations the RH850 multicore real-time expression update does not work.
0000		
		If the workspace is copied or moved from the original folder, coverage information may not be displayed.
6657	Coverage plugin	Please re-build the program in the new workspace.
		The "Renesas GDB Hardware Attach" causes a NullPointerException. This results in this feature
6676	Application	not being usable.
		For RX devices, when 'step' command is invoked for WAIT instruction, GDB might report an error.
6701	GDB server	Please use 'resume' command for WAIT instruction instead.
		In some cases after reload symbols are not being updated correctly. Appears to be related to
		caching with CDT. GDB symbol information is correctly updated, and expressions which directly access fields in structures updated correctly, but overall structures are not correct.
6859	CDT	
		KPIT GNURX toolchain: "interrupt" attribute keyword in r_cg_interrupt_handlers.h is missing about the following interrupt
	CodeGenerator	functions. Please add keyword "interrupt" to attribute of prototype declaration.
7336	plugin	

		example:
		example: void r_tmr_cmia0_interrupt(void)attribute ((interrupt));
		RX113 CMT,CMPB,TMR,SCI,RIIC
		RX23T S12AD,CMPC RX231 DMAC,ELC,TPU,TMR,CMT,SCI,RIIC
		The problem of missing of "interrupt" is, the interrupt function returns by the mnemonic "RTSD". The interrupt function should return by "RTE".
7355	GDB server RX	When connecting to RX63x, RX64x, RX7xx, RX2xx, or RX1xx with user-boot mode, it will fail. Please do not use user boot mode for these devices.
7498	Application	Multi-byte characters can cause a compilation failure when used as a build configuration name in e2 studio.
1.00	, ip prioditori	PDF file is associated with Microsoft Edge by default in Windows 10.
		However, Smart Browser and Smart Manual will not be able to recognize that the Microsoft Edge is associated with a PDF.
7546	Smart Browser	Please install the PDF viewer such as Adobe Reader and specify the application of default to open the PDF file.
		lodefine.h files for RX230 and RX231 were incorrect about portj.
		st_portj.ODR0.BIT.B3 is incorrect.
		st_portj.ODR0.BIT.B6 is correct.
		Please correct it as follows.
		<incorrect></incorrect>
		struct st_portj {
		:
		union {
		unsigned char BYTE;
		struct {
		unsigned char :4;
		unsigned char B3:1; < B3 does not exist.
		unsigned char :3;
		} BIT;
		} ODR0;
		}
		<correct></correct>
		struct st_portj {
		:
		union {
		unsigned char BYTE;
7570	A	struct {
7570	Application	

		unsigned char :1;
		unsigned char B6:1;
		unsigned char :6;
		} BIT;
		} ODR0;
		:
		}
		Execution Address Eventpoints with trigger count do not work with Breakpoints on Segger RX.
		Setting an execution address eventpoint with a trigger count on Segger JLink RX62N is not possible if any breakpoints exist, including the default at main.
074		If an execution address eventpoint with a trigger count is set with a breakpoint both the eventpoint & the breakpoint do not function. Multiple breakpoints are set then only 1 does not work.
874	GDB server RX	Additional eventpoints function as normal.
		Breakpoint properties do not work when set in the CDT dialogs. For example using the filter
1486	Application	operation and removing the breakpoint for the process being debugged.
		Erase flash on start-up option on RL78 should be executed once.
		When e2studio connects successfully to RL78 target and erases the flash, this option should
1642	Application	return to false, so that flashing is not done every time target is connected.
1012	, application	
		For the SH7216 target (and most likely other targets), when using the address conditions and associated mask, the boolean parameter (parameter 17) 'address mask compare type' is not being set to true.
1645	Event points plugin	
		When setting the 'Internal Flash Memory Overwrite' debug option, it is possible to exceed the maximum number of non-continuous memory blocks supported. No warning is given if this limit is exceeded.
		When setting this option ensure the limit (16 for RX devices) is not exceeded.
1778	Application	
		Import a HEW RX project in e2studio using the HEW project importer.
	HEW Project	Check: Project > Properties > Compiler > Source > Include file directories. Paths are duplicated.
1808	Converter	
		Program execution stops inside a range when Range Exclusive is specified in the address settings for OA event points.
1859	GDB server	
		Due to file extension issue with .s and .S and due to known bug, e2studio users won't be able to use .s or .S effectively to pre-process assembly files that need GCC. Hence we suggest renaming these files to use:
		.S -> .asm
1889	Application	.s -> .src
1009	πρριισαίοι	1

		A user tries to import an already imported project (in a different workspace) again. However the project is deleted from the previous workspace.
		This results in the following error message "The selected .hwp file overlaps the location of another project". See attached dialog.
		This is because when the project is removed from the project tree the Eclipse projects are not physically removed. Deleting the Eclipse project files from the directory allows the operation to
1950	HEW Project Converter	continue.
		For Renesas CCRX the Converter phase gets invoked even when using the external linker subcommand option. This should not happen.
1982	RX GCC build plugin	
		HEW Project Import fails to build file due to File or path name too long.
2010	HEW Project Converter	This is due to the difference between HEW and Eclipse. In HEW object files are output to the configuration directory. In Eclipse the files are output alongside the source file in the same directory.
2010	Converter	
		It is possible for .c and .C files to be treated in the same manner in certain situations which is not correct.
2299	RX GCC build plugin	(.C extension is changed to .c during project build).
2233		Use of duplicate register is allowed for RXC project generation.
		1. Create RXC project
		2. Go to RXC Global option page, select "ROM" -> "R8"
		3. Select the same value for any other register (e.g. "RAM" -> "R8"), it gives error message and prevents the user from project creation.
0.440		 Now select "R8" again for "RAM" register. It doesn't show any error message and allows user to create the project.
2416	Project Generation	
2486	Profile plugin	Acquiring profile results can take a very long time following RX Simulator debugging.
		Performance Analysis: Performance time is not updating following changes to start and stop performance addresses.
		For the G13 IECUBE it supports one run/break timer. Currently e2 studio is setting the support to
2537	Performance Analysis	3.
		HEW Importer, output file (.P/.PP) is not generated while building the project.
2693	Application	Workaround: User will need to select Settings -> Compiler -> Object -> output file type -> Pre- processed source file -> OK after importing the project and then build the project.
		Before PC events on IECube temporarily hard coded limit of 4.
2716	GDB server RL78	
2850	CDT	When using IAR projects the SFR names (e.g. PIOR1_bit.no1) are not understood correctly in the editor.
2859		Registers do not display properly on SH2A 72691
2910	GDB	Registers do not display properly on SH2A 72691.

3389	Application	When debugging files with the same name show source addresses even though it may not be correct for the file in question. The full file path is not considered just the filename and current debug context. This can lead to e2 studio showing addresses unnecessarily.
3526	Profile plugin	In some cases when using RX with the CCRX compiler the profile view does not display the source file name and path in the window.
3550	Application	Custom placeholders are not expanded when importing a project from HEW. This is currently expected behavior but may be improved in a future version.
3585	Application	The GDB server crashes when an E1 emulator is connected to a debug configuration configured for the Segger emulator.
3626	Trace plugin	Snapshot trace - adding IO register eventpoints increases the data shown in the trace view, but as they were removed there was no change in the data shown.
3663	Application	With 2 targets connected, clicking between the two debug contexts in the Debug View will update the source addresses in the open Editor files. However changing debug context does not seem to get detected if clicking on the top-level of the debug context rather than on the lower level.
3003	Αρριτσαιιοη	The code generator is not automatically registered when installing into generic Eclipse. Browse to the CG plugin and then run the batch files that reside in the tools directory. e.g.
3804	Application	C:\Renesas\e2_studio\eclipse\plugins\com.renesas.cg_1.0.0.201309061659\CodeGenerator\Tools
3813	Event points plugin	OA event break event points not breaking at correct addresses on SH7203 (External Flash) target.
3836	Application	Dependencies with file name that have spaces may cause dependency scanning issues. Where possible it is better to avoid using spaces in dependency file names.
		By default the e2 studio editor character code is set to UTF-8. This means it is possible to enter characters that are then not supported by default by the CCRX toolchain. CCRX default input is SJIS.
3928	CCRX Build plugin	To enable UTF-8 for the toolchain you must first select C99 support.
		When importing a HEW project if it contains folders with the same name at the same hierarchy then not all the files will import successfully. i.e. "\WorkSpace\WorkSpace\Developments\src\embOS\Util\MEASUREMENT.c" "\WorkSpace\WorkSpace\Developments\src\protocols\util\SerialUtil.c"
3945	Application	
		Breakpoints cannot be unset within the editor when code is #ifdef out.
3950	Application	These breakpoints will need to be removed from the breakpoints plugin.



		When importing projects from HEW into e2 studio when the files are read only, build errors occur
3992	Application	following import. Ensure the files are writable.
0002	, pp. location	
		When the project is re-named. If the user then uses the feature project > Build Configurations > Build All. The active configuration builds successfully but subsequent configurations fail.
4104	Application	
4189	Project Generation	It is not possible to build project which has more than 98 characters in its project name.
		When importing a project from CubeSuite+ to e2 studio the "toolchain version is changed" dialog is always displayed.
4350	CubeSuite+ importer/exporter	This is because the version string in imported project file and the toolchain information in e2 studio does not match. Ignoring this dialog and continuing should result in a successful import.
4450	CCRX Build plugin	Linker section settings of Renesas toolchain are not getting saved for multiple configurations.
		The Module View of e2 studio does not display any information when an executable which includes debug information was downloaded to the target.
4492	Application	
		When building projects with CCRX that are in deep directory structures it is possible to experience build issues. e2 studio is unable to build projects which create command lines greater than 8191 characters.
4515	CCRX Build plugin	
4507	Application	In some cases when a before PC eventpoint is set just after a break point, the program execution will not stop at the address the eventpoint is located at.
4597	Application	
		When sub menu "Add Watchpoint" is performed from a Memory view, it seems to have been registered correctly in the Breakpoints view even if there is an error condition.
4007		An error occurs by "Add Watchpoint", when the maximum number of events was exceeded, or when a ROM area is specified.
4607	GDB server	
		The option to Reset timer before each run, which is setup on the "Performance Analysis" dialog box is not reflected for RL78.
		The specification for RL78 is that the values are reset all of the time so the option has no meaning.
4783	Performance Analysis	
		Individual compile is not execute when Level2 is specified at the "Perform inter-module
4819	CCRX Build plugin	optimization".
		The "Memory" view always opened on launch of a debug session. It should not be re-opened on launch if it has been closed in the previous debug session.
4869	Memory View plugin	
		Code Generator can delete user code between /* Start */ End comments in some situations.
		Using the code generator if the following code is placed in the main function:
		//if(data_in!=0xAA){
5041	Code Generator plugin	on a line by itself, all of the main code will be removed when Generate Code button is pressed.

		The key issue is that the {brace is on the same line as the comment.
5050		Timestamp setting on the Trace view has no effect on results for Profile view for RX devices.
5056	GDB server RX	
5083	CubeSuite+ importer/exporter	Folder level options are not converted correctly
5124	Application	Active configuration lost while importing project (which is exported as file system).
		Files included in the Pre-include build options are not analyzed for the pre-processor statement in
5171	CCRX Build plugin	the editor. This can give the impression that code is not included in the build when it is.
		If you create a project and debug session for a GDB simulator before executing a hardware debug session it will fail. This is because the debugger support is not unpacked until a hardware debug session is used.
5004	Application	To work around setup and launch a hardware debug session. You do not actually need hardware to do this.
5201	Application	
		When you add a new configuration, please do not specify 'Default Configuration' as a configuration used as a base.
5290	CCRX Build plugin	If you specify the 'Default Configuration', the configuration which does not operate correctly is created.
5467	Memory View plugin	Settings in the 'Formati' dialog (Memory view) are not restored.
		To use the data access events as trace start, trace stop or trace record for RH850 with E1 emulator, please do not use the "Compare Settings" condition for the event.
5547	Application	
5637	Multicore	For RH850 multicore devices, disassembly result may be different from the expected. In this case, please refresh the view after changing the debug context to the other PE.
	_	RX targets and IO registers greater than 1 byte.
		e.g.
		winA 0x88028
		winB 0x8802a
		View register in both IO view and register view.
		Value in memory view is reversed.
		This is because the IO, (like all RX memory for little endian targets is reversed).
5770	Application	

		When importing a project and debugging before visiting the debug configuration the debug connection will fail.
		Visiting the debug configuration or creating a new project uncompressed the support files. Once
5778	Debug Configuration	this has happened debug connection can continue as normal.
6394	GDB server RX	Trace Record event point does not filter correctly with Segger RX63N.
		When User boot mode is selected at the setting for Mode pin in CPU Operating Mode, the warning for USB boot program is displayed even if the device does not have USB boot program.
6408	Application	Please click 'yes' if the device does not have USB boot program.
6450	Application	When "Prevent debugger from re-writing on-chip Program ROM" is checked and "Force Hardware Breakpoints" is set to No setting breakpoint fails and the program will not execute.
6463	Application	Memory view requires manual refresh to see changes when downloading auxiliary file.
6545	Profile plugin	No profile data is displayed in the profile view for GNUSH or SHC projects.
6557	GDB Server RH850	Breakpoints are not always being cleared completely when a breakpoint is removed.
		The enable state of eventpoints for any debug configuration is not restored when the debug configuration is launched for the first time after e2 studio is started.
6605	Event points plugin	In subsequent launches the eventpoints are enabled/disabled appropriately.
6704	Application	For RZ/T1 target a user can select Profile View. When selecting button 'Turn Profiling On' this is allowed to be enabled although this is not supported.
		If address of variable is changed then this address should be updated in waveform view as well,
6817	Waveform plugin	but it is not so.
		Combination of "C++ project" and "CC-RL" toolchain is selectable.
		But, "CC-RL" toolchain does not support "C++ project".
6852	Project Generation	So, do not select the combination of "C++ project" and "CC-RL" toolchain.
0002		
		For SH2a-FPU devices the register view may show incorrect values for the SR register and the
6953	GDB Server SH	MACH\L register
		RX64M code generator
		Multifunction timer pulse unit 3
		When TGRC0, TGRD0 and TGRE0 is set to buffer register mode in normal mode, TMDR1 register setting is incorrect.
7180	Code Generator plugin	Currently
7180		Currently

		MTU0.TMDR1.BYTE = _00_MTU_NORMAL;
		Correct
		MTU0.TMDR1.BYTE = _00_MTU_NORMAL _10_MTU_BFA_BUFFER _20_MTU_BFB_BUFFER _40_MTU_BFE_BUFFER
		Please add the missing code manually.
		In some cases the IAR project importer does not perfectly import all set build options.
7277	IAR plugins	One example is the -HFF command line option that can be specified in the command line options text box for the linker.
		1.RX231 and RX230 devices more than 100pin have Open Drain setting for PORT J. But, Code Generator doesn't support Open Drain item on PORT GUI. If necessary, please add ODR0 register setting code manually.
		2. RX230 devices have the following pins. But, Code Generator doesn't support items for them. PORT H cannot be set as I/O port and other multiplexed pin functions.
		PH0/CACREF, PH1/IRQ0/TMO0, PH2/IRQ1/TMRI0, PH3/TMCI0
		3. PinView (Pin List, Top View) is not supported about the following RX231 devices.
		48pin:
		R5F52315CxNE, R5F52316CxNE, R5F52315CxFL, R5F52316CxFL
		64pin:
		R5F52315CxND, R5F52316CxND, R5F52315CxFM, R5F52316CxFM, R5F52315CxLF, R5F52316CxLF
		100pin:
		R5F52315CxLA, R5F52316CxLA, R5F52315CxFP, R5F52316CxFP
		4.4. At RX231 and RX230. When MTU2 is used with Complementary PWM Mode n, build error occurs because of no macro definition. Please modify the code.
		File: R_MTU2_Create (), r_cg_mtu2.c;
		Error line: MTU3.TCNT = xxxxxxx;
		Modified code: please set the same value for MTU.TDDR register.
		e.g.)
		original code:
		MTU3.TCNT = _00A0_3TCNT_VALUE; // error
		MTU.TDDR = _00A0_TDDR_VALUE;
		modified code:
		MTU3.TCNT = _00A0_TDDR_VALUE;
	Code Generator	
7288	plugin	MTU.TDDR = _00A0_TDDR_VALUE;



		When font size is changed as magnified, some of components
		of dialog can be hidden with magnified fonts.
7298	Application	In this case, please resize and expand dialog size.
7290	Application	
		The build throws an exception when setting '-no-keep-memory' and '-mrelax' options at the same time for a GNURX project.
7305	Application	
		When using the RX Simulator with real-time expressions if you use 1ms real-time interval the expression view goes blank. On suspend, e2 studio appears to hang while messages are processed.
7333	Real-time Watch	Reverting the interval to 10ms works well.
7351	Trace plugin	The trace plugin does not maintain the trace Filter and Find settings for each debugging context. Changing the context in the debug view may result in these settings being lost.
1001		
		When connecting with RX simulator, Profile view does not show any information.
		Profile view sometimes show some information, it is not correct information.
7380	GDB server RX	
7402	CDT	The setting 'Use a fixed build configuration' in the dialog, Properties->C/C++ General->Indexer is not saved when the user checks it.
7403	CDI	When using RL78 the HL register value cannot be modified in some circumstances.
		This will only occur when bank 0 is not selected.
		Changing HL value only ever causes Bank 0 HL to change. View will always show current bank value.
7412	Application	Values not in bank 0 can still be changed by accessing bank registers directly.
	, ipplication	
		In some cases the disassembly view does not refresh correctly on suspend. When this problem
		happens the refresh operation does not fix the problem. To restore the functionality close and re- open the view.
7423	CDT	
		The option "Low voltage OCD board" in the debug configuration for RL78 E2 Lite is not supported.
		Please don't set this option to "Yes".
7456	GDB server RL78	
		The option "Hot Plug" in the debug configuration for RL78 E2 Lite is not supported.
		Please don't set this option to "Yes".
7457	GDB server RL78	
		When using the RX Simulator the trace view does not show correct source and disassembly information when these two modes are enabled.
7468	GDB server RX	

		Using the "Renesas GDB Simulator Running" feature does not work for SH.
7483	Application	"Problem"
		(V.4.1.0)
		When a project which specifies MISRA-C option changed the toolchain version, the MISRA-C option is deleted.
		"Workaround"
7497	CCRX Build plugin	Please re-specify the MISRA-C option.
		"'Problem'"
		An error occurs by project operation when the character besides ASCII cord was used for the file name or the folder name.
		"'Workaround"'
		Please don't use the character besides ASCII cord for the file name or the folder name.
7508	Application	
		For RAM based RZ-T1 projects a re-download of code will trigger a reset that erases the RAM
		making further debugger operation impossible. The workaround is to instead disconnect and then reconnect.
7524	GDB Server RZ	
		Performance Analysis view does not show time result (even 0) if the time taken is very short (less
7533	Application	than 1 unit of the emulator or device).
1000	Application	GNURL78 (G10 - R5F10Y14): Project build fails for debug configuration when using the GDB
		simulator.
		G10 - R5F10Y14 has a small RAM area. We need to reduce the stack size limit. Reducing the stack size limit from 0x64 to 0x32 (i.e. modifying PROVIDE (stack_size = 0x64) to PROVIDE
7572	Application	(stack_size = 0x32) in the linker script) builds the project successfully.
1512	Application	
		Start / Stop Function Settings for RL78 are sent once on connecting. If the address for start
		function or stop function is changed by building the program, please disconnect from target and reconnect again.
7588	Application	
		For RL78 E2 Lite, please use RESET# for the pin which has multiple functions of both RESET# and PORT.
7592	GDB server RL78	
1392	GDD SEIVEI KL/O	When the project dependency is specified to two project, Build warning occurs and .x file does not
70.10		be created.
7619	CCRX Build plugin	
4000	Arrest di	When a data access event for RX is set with the data mask value as 0, the comparison will be treated as "Equals" and the data mask value will be treated as 0xFFFFFFF.
4982	Application	When debugging with RX there are problems with setting breakpoints when the hardware
		breakpoint resources have been exhausted and the software breakpoint setting also fails.
		In this case the breakpoint appears to be valid but the debugger will not stop.
		This can often be seen when the option "Program re-writes internal Data Flash" is set to yes. As this means software breakpoints cannot be set.
6208	Application	

7057	Event points plugin	When adding an event point to an external source code file. (File added using "Link to file in the file system" option). There can be problems adding the event point in this case.
		RX230, RX231, RX23T Code Generator
		There is a build warning when using CC-RX toolchain project.
		Because Code Generator adds the unnecessary section "FIXEDVECT" into Linker option.
		Warning Message: W0561100: Cannot find "FIXEDVECT" specified in option "start"
7434	CodeGenerator plugin	Please ignore the warning or remove section "FIXEDVECT" from Linker option before the build.
		The Insert Spaces for Tab feature in the Eclipse editor does not work. This is an Eclipse platform issue.
7491	Application	
6616	Event points plugin	When adding a new Data Access eventpoint, the Compare value (on the Data Access Settings tab) is always converted to hex and subsequently displayed in hex even if the value entered does not include an 0x prefix.

