

RZ/T2L Safety Network Reference Kit System Configuration

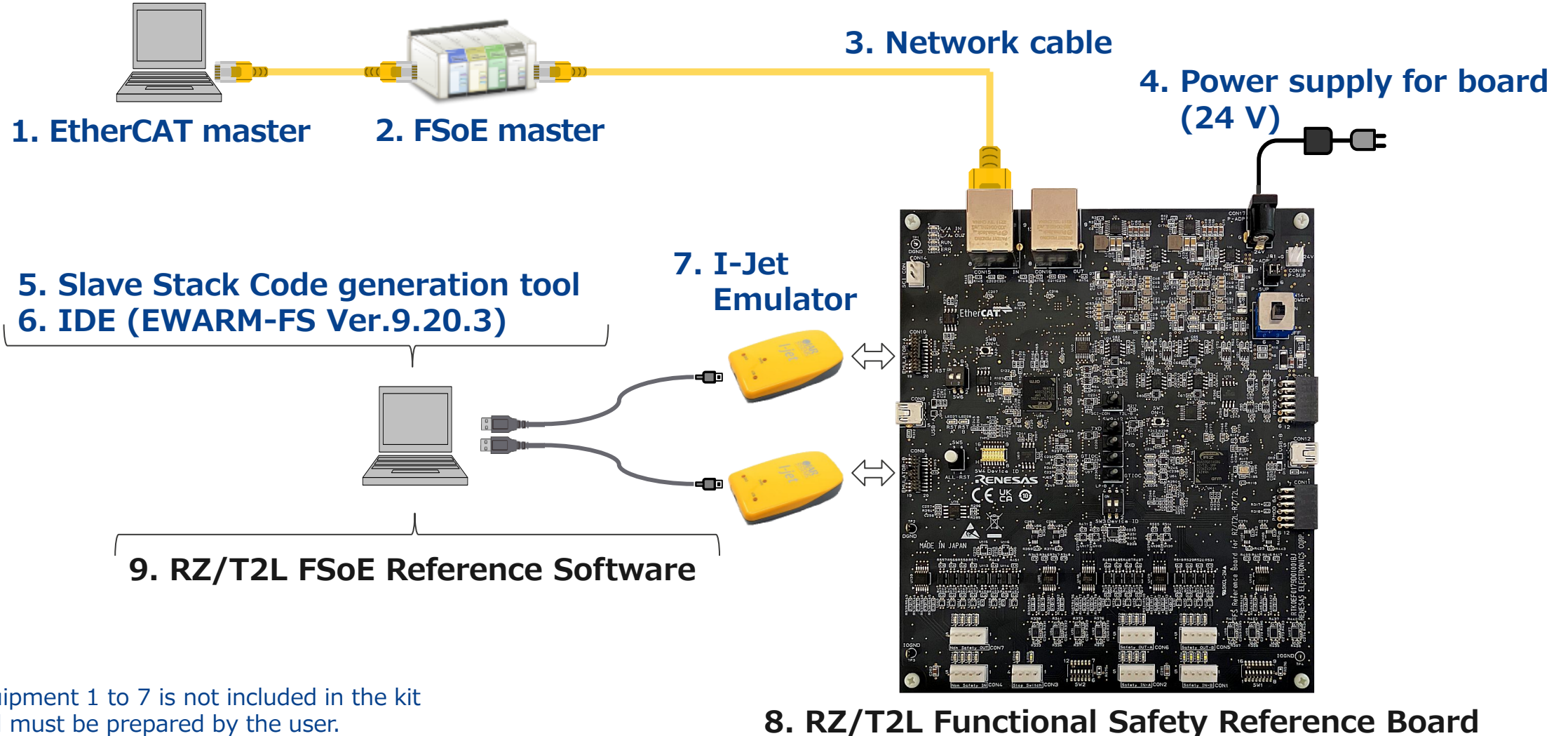
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System configuration example when using RZ/T2L FSoE Reference Software



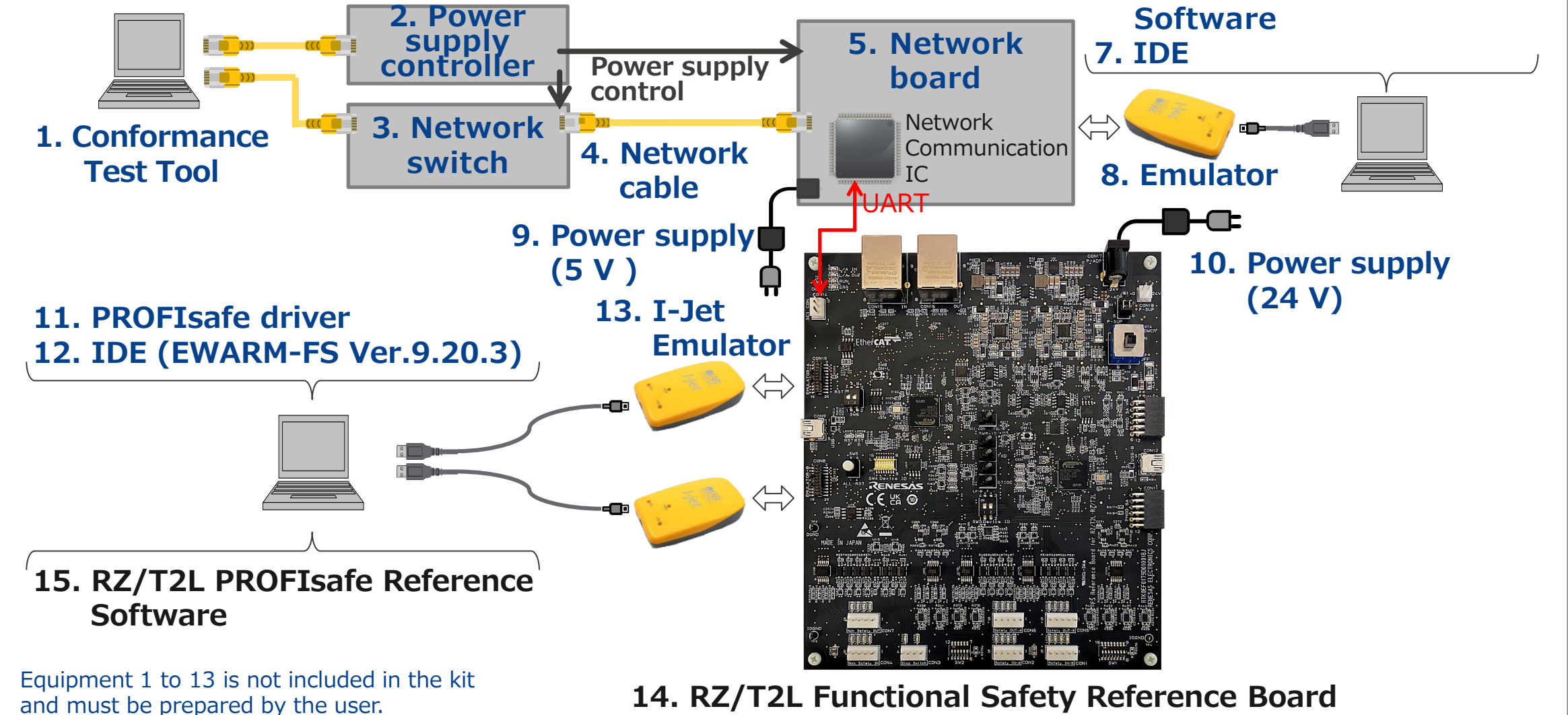
Equipment List when using RZ/T2L FSoE Reference Software

#	Category	Product name/model name	Manufacturer
Not included in the reference kit			
1	EtherCAT master *1	TwinCAT3 (Ver 3.1.4022.29)	Beckhoff Automation
2	FSoE master *1	- EtherCAT Coupler: EK1100 - EtherCAT Terminal communication interface, TwinSAFE Logic: EL6900 - Bus end cover for E-bus contacts: EL9011	Beckhoff Automation
3	Network cable	Not specified	
4	24 V power supply for board	See user's manual of the RZ/T2L Functional Safety Reference Board for details.	
5	Slave Stack Code generation tool *2	Slave Stack Code Tool (Ver 5.13) *2	Beckhoff Automation
6	IDE *1	EWARM-FS (Ver.9.20.3)	IAR Systems
7	Emulator *1	I-Jet	IAR Systems
Included in the reference kit			
8	RZ/T2L Functional Safety Reference Board	RTK0EF0179D01001BJ	Renesas Electronics
9	RZ/T2L FSoE Reference Software	RTK0EF0200F01001SJ_FS (Download from the URL in the board)	Renesas Electronics

*1 : For how to get them, please contact each maker.

*2 : Needs EtherCAT Technology Group membership and Vendor ID.

System configuration example when using RZ/T2L PROFIsafe Reference Software



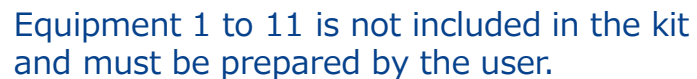
Equipment List when using RZ/T2L PROFIsafe Reference Software

#	Category	Product name/model name	Manufacturer
Not included in the reference kit			
1	Conformance test tool ^{*1}	Automated RT Tester (v.2.41.0.2)	SIEMENS
2	Power supply controller ^{*1}	NET-PwrCtrl PRO	ANEL
3	Network switch ^{*1}	Scalance X204IRT	SIEMENS
4	Network cable	Cable of Cat5e or over	
5	Network board ^{*2}	RZ/N2L-RSK : RTK9RZN2L0S00000BE or RZ/T2M-RSK : RTK9RZT2M0S00000BE	Renesas Electronics
6	Network Communication Software ^{*2}	RZ/T2, RZ/N2 PROFINET IRT DEVKIT (Rev.1.10 or later)	Renesas Electronics
7	IDE (for network board)	- EWARM (Ver.9.50.1) ^{*1} or e ² studio 2024-01.1 ^{*2} - RZ/T Flexible Software Package (FSP) v2.0.0 ^{*2}	IAR Systems/ Renesas Electronics
8	Emulator (for network board)	When using EWARM: I-Jet ^{*1} When using e ² studio: J-Link OB on the network board	IAR Systems/ Renesas Electronics
9	5 V power supply for network board	See user's manual of the board for details.	
10	24 V power supply for reference board	See user's manual of the board for details.	
11	PROFIsafe Driver	PROFIsafe Driver V2.2.3 for F-Slaves ^{*3}	SIEMENS
12	IDE (for reference board) ^{*1}	EWARM-FS (Ver.9.20.3)	IAR Systems
13	Emulator (for reference board) ^{*1}	I-Jet	IAR Systems
Included in the reference kit			
14	RZ/T2L Functional Safety Reference Board	RTK0EF0179D01001BJ	Renesas Electronics
15	RZ/T2L PROFIsafe Reference Software	RTK0EF0200F01001SJ_PR (Download from the URL in the board)	Renesas Electronics

^{*1} : For how to get them, please contact each maker.

^{*2} : Please get from the [RZ/N2L-RSK](#), [RZ/T2M-RSK](#) website.

^{*3} : The available drivers are SIEMENS PROFIsafe-Starter kit V3.5.2 with PROFIsafe profile V2.6 MU1 included PROFIsafe Driver V2.2.3 for F-Slaves.



Equipment List when using RZ/T2L CIP Safety Reference Software

#	Category	Product name/model name	Manufacturer
Not included in the reference kit			
1	PLC programming environment *1	Studio 5000 Logix Designer (9324M-RLDT11M Studio 5000 Lite Edition)	Rockwell Automation
2	PLC (Originator) *1	- Compact GuardLogix SIL3 0.6.0,3M Motion : 5069-L306ERMS3 - Compact 5000 Spring RTB : 5069-RTB64-SPRING	Rockwell Automation
3	Network cable	Cable of Cat5e or over	
4	Network board *2	RZ/N2L-RSK : RTK9RZN2L0S00000BE	Renesas Electronics
5	Network Communication Software *2	RZ/N2L EtherNet/IP OpENer Sample Program *3	Renesas Electronics
6	IDE (for network board)	- EWARM (Ver.9.60.2) *1 or e2 studio 2024-10 *2 - Flexible Software Package (v2.1.0) *2	IAR Systems/ Renesas Electronics
7	Emulator (for network board)	When using EWARM: I-Jet *1 When using e2 studio: J-Link OB on the network board	IAR Systems/ Renesas Electronics
8	5 V power supply for network board	See user's manual of the board for details.	
9	24 V power supply for reference board	See user's manual of the board for details.	
10	IDE (for reference board) *1	EWARM-FS (Ver.9.20.3)	IAR Systems
11	Emulator (for reference board) *1	I-Jet	IAR Systems
Included in the reference kit			
12	RZ/T2L Functional Safety Reference Board	RTK0EF0179D01001BJ	Renesas Electronics
13	RZ/T2L CIP Safety Reference Software	RTK0EF0200F01001SJ_CI (Download from the URL in the board)	Renesas Electronics

*1 : For how to get them, please contact each maker.

*3 : Note that the EDS file required for the slave device must also be prepared by the user.

*2 : Please get from the [RZ/N2L-RSK](https://www.renesas.com/en/products/industrial/automation/robotics/rz-n2l-rsk) website.

