

Product Change Notice (PCN)

Subject: Addition of production factory for RL78/G1x, I1D HWQFN package products

Publication Date: 4/21/2026

Effective Date: 8/31/2026

Revision Description: Initial release

Description of Change: Addition of assembly and sorting factory.

Product group: RL78/G11, G12, G13, G14, G16, G1A, G1C, G1F, G1P, I1D

Target Package: 24, 32, 48pin HWQFN

Existing factory: Greatek Electronics Inc. (Greatek)

King Yuan Electronics Co., Ltd (KYEC)

UTAC Thai Limited (UTAC)

Additional factory: Renesas Semiconductor (Beijing) Co., Ltd. (Beijing)

Difference in specification:

Item		Additional	Existing	
Assembly factory		Beijing	Greatek	UTAC
Sorting factory		Beijing	KYEC	UTAC
Package	Drawing	There are differences (Refer to Appendix for detail)		
Lead frame	Material	No change		
Die mount	Material	Ag epoxy paste C *	Ag epoxy paste A *	Ag epoxy paste B *
Bonding wire	Material	No change; Cu (Pd coating)		
Resin	Material	Epoxy resin C * (Halogen-free)	Epoxy resin A * (Halogen-free)	Epoxy resin B * (Halogen-free)
Plating	Material	No change		
Marking		There are differences (Refer to Appendix for detail)		
Packing	Tray	No change		
	Tape & Reel	There are differences (Refer to Appendix for detail)		
Storage conditions	After opening	No change; 30°C/60%RH/ within 168hr (JEDEC standard)		

* Factory certified materials.

There are differences in materials, but there is no change in reliability or characteristics.

Note) Existing factories are different depending on the part number.

Affected Product List:

R5F1057AANA#00	R5F1057AANA#40	R5F1057AANA#60	R5F1057AA***NA#00
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R5F10277GNA#45	R5F10277GNA#65	R5F10277G***NA#05	R5F10277G***NA#45
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R5F11B7EGNA#40	R5F11B7EGNA#60	R5F11B7EG***NA#00	R5F11B7EG***NA#40
R5F11BBCANA#00	R5F11BBCANA#40	R5F11BBCANA#60	R5F11BBCA***NA#00
R5F11BBCA***NA#40	R5F11BBCGNA#00	R5F11BBCGNA#40	R5F11BBCGNA#60
R5F11BBCG***NA#00	R5F11BBCG***NA#40	R5F11BBEANA#00	R5F11BBEANA#40
R5F11BBEANA#60	R5F11BBEA***NA#00	R5F11BBEA***NA#40	R5F11BBEGNA#00
R5F11BBEGNA#40	R5F11BBEGNA#60	R5F11BBEG***NA#00	R5F11BBEG***NA#40

R5F11Z7AANA#00	R5F11Z7AANA#40	R5F11Z7AANA#60	R5F11Z7ADNA#00
R5F11Z7ADNA#40	R5F11Z7ADNA#60	R5F11778GNA#00	R5F11778GNA#40
R5F11778GNA#60	R5F11778G***NA#00	R5F11778G***NA#40	R5F1177AGNA#00
R5F1177AGNA#40	R5F1177AGNA#60	R5F1177AG***NA#00	R5F1177AG***NA#40

“***” means ROM code

Reason for Change:

Stable production supply for the products.

Impact on Fit, Form, Function, Quality & Reliability:

Fit: No Impact

Form: Refer to Appendix for detail.

Function: No Impact

Quality: No Impact

Reliability: No Impact

Product Identification:

Our production history data can be queried by using the packing label or trace code of the product.

Qualification Status: Starts to become available from 7/1/2026.

Sample Availability Date: 7/31/2026 onward.

Sample acceptance deadline is at the end of May 2026.

PCN sample is a representative ES sample.

The ES sample has the same functionality as the mass-produced product and its sample is the representative (ROM/RAM capacity and Fields of application).

Device Material Declaration: Available upon request.

Note:

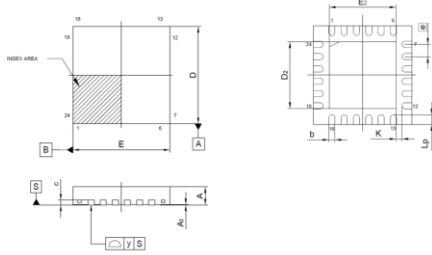
1. Acknowledgement must be received by Renesas within 30 days or Renesas will consider the change as approved.
2. If timely acknowledgement is provided by Customer, then Customer shall have 90 days from the date of receipt of this PCN to make any objections to this PCN. If Customer fails to make objections to this PCN within 90 days of the receipt of the PCN then Renesas will consider the PCN changes as approved.
3. If customer cannot accept the PCN then customer must provide Renesas with a last time buy demand and purchase order.

For additional information regarding this notice, please contact your Renesas sales representative.

Appendix

24pin HWQFN Package Drawing (Beijing)

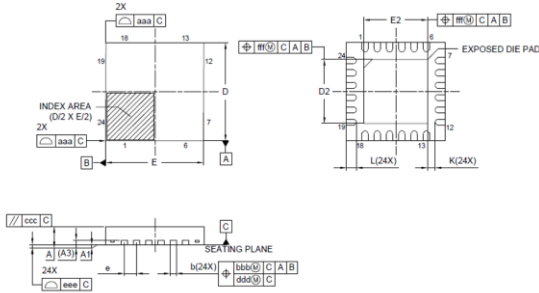
RENESAS Code : PWQN0024KJ-B



Beijing Symbol	4x4mm 24pin HWQFN PWQN0024KJ-B		
	Dimension in Millimeters		
	Min	Nom	Max
D	3.85	4.00	4.15
E	3.85	4.00	4.15
A	-	-	0.80
A1	0.00	-	0.05
b	0.18	0.25	0.30
e	0.50 BSC		
Lp	0.35	0.40	0.45
y	-	-	0.08
c	-	0.20	-
K	0.20	-	-
D2	-	2.70	-
E2	-	2.70	-

24pin HWQFN Package Drawing (Greatek)

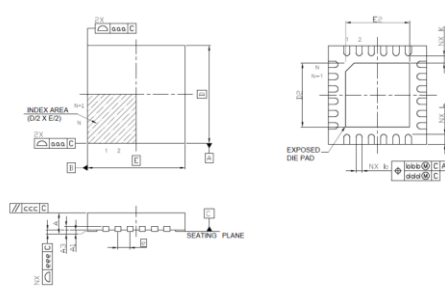
RENESAS Code : PWQN0024KF-A



Greatek Symbol	4x4mm 24pin HWQFN PWQN0024KF-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	0.02	0.05
A3	0.203 REF.		
b	0.18	0.25	0.30
D	4.00 BSC		
E	4.00 BSC		
e	0.50 BSC		
L	0.35	0.40	0.45
K	0.20	-	-
D2	2.55	2.60	2.65
E2	2.55	2.60	2.65
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		

24pin HWQFN Package Drawing (UTAC)

RENESAS Code : PWQN0024KH-A



UTAC Symbol	4x4mm 24pin HWQFN PWQN0024KH-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	-	0.05
A3	0.20 REF.		
b	0.20	0.25	0.30
D	-	4.00	-
E	-	4.00	-
e	-	0.50	-
N	24		
L	0.30	0.40	0.50
K	0.20	-	-
D2	2.50	2.60	2.70
E2	2.50	2.60	2.70
aaa	-	-	0.15
bbb	-	-	0.10
ccc	-	-	0.10
ddd	-	-	0.05
eee	-	-	0.08

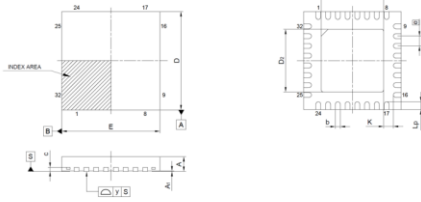
Dimension Comparison: 24pin HWQFN Package Drawing

Beijing Symbol	4x4mm 24pin HWQFN PWQN0024KJ-B			Greatek Symbol	4x4mm 24pin HWQFN PWQN0024KF-A			UTAC Symbol	4x4mm 24pin HWQFN PWQN0024KH-A		
	Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters		
	Min	Nom	Max		Min	Nom	Max		Min	Nom	Max
A	-	-	0.80	A	-	-	0.80	A	-	-	0.80
A1	0.00	-	0.05	A1	0.00	0.02	0.05	A1	0.00	-	0.05
c	-	0.20	-	A3	0.203 REF.			A3	0.20 REF.		
b	0.18	0.25	0.30	b	0.18	0.25	0.30	b	0.20	0.25	0.30
D	3.85	4.00	4.15	D	4.00 BSC			D	-	4.00	-
E	3.85	4.00	4.15	E	4.00 BSC			E	-	4.00	-
e	0.50 BSC			e	0.50 BSC			e	-	0.50	-
-	-	-	-	-	-	-	-	N	24		
Lp	0.35	0.40	0.45	L	0.35	0.40	0.45	L	0.30	0.40	0.50
K	0.20	-	-	K	0.20	-	-	K	0.20	-	-
D2	-	2.70	-	D2	2.55	2.60	2.65	D2	2.50	2.60	2.70
E2	-	2.70	-	E2	2.55	2.60	2.65	E2	2.50	2.60	2.70
-	-	-	-	aaa	0.15			aaa	-	-	0.15
-	-	-	-	bbb	0.10			bbb	-	-	0.10
-	-	-	-	ccc	0.10			ccc	-	-	0.10
-	-	-	-	ddd	0.05			ddd	-	-	0.05
y	-	-	0.08	eee	0.08			eee	-	-	0.08
-	-	-	-	fff	0.10			-	-	-	-

Beijing package symbols complied to JEITA standard.
Greatek and UTAC package symbols complied to JEDEC standard.

32pin HWQFN Package Drawing (Beijing)

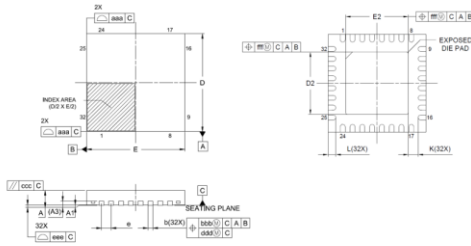
RENESAS Code : PWQN0032KJ-A



Beijing Symbol	5x5mm 32pin HWQFN PWQN0032KJ-A		
	Dimension in Millimeters		
	Min	Nom	Max
D	4.85	5.00	5.15
E	4.85	5.00	5.15
A	-	-	0.80
A1	0.00	-	0.05
b	0.18	0.25	0.30
e	0.50 BSC		
Lp	0.35	0.40	0.45
y	-	-	0.08
c	-	0.20	-
K	0.20	-	-
D2	-	3.20	-
E2	-	3.20	-

32pin HWQFN Package Drawing (Greatek)

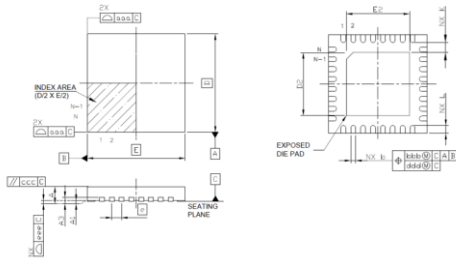
RENESAS Code : PWQN0032KE-A



Greatek Symbol	5x5mm 32pin HWQFN PWQN0032KE-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	0.02	0.05
A3	0.203 REF.		
b	0.18	0.25	0.30
D	5.00 BSC		
E	5.00 BSC		
e	0.50 BSC		
L	0.35	0.40	0.45
K	0.20	-	-
D2	3.15	3.20	3.25
E2	3.15	3.20	3.25
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		

32pin HWQFN Package Drawing (UTAC)

RENESAS Code : PWQN0032KG-A



UTAC Symbol	5x5mm 32pin HWQFN PWQN0032KG-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	-	0.05
A3	0.20 REF.		
b	0.20	0.25	0.30
D	-	5.00	-
E	-	5.00	-
e	-	0.50	-
N	32		
L	0.30	0.40	0.50
K	0.20	-	-
D2	3.10	3.20	3.30
E2	3.10	3.20	3.30
aaa	-	-	0.15
bbb	-	-	0.10
ccc	-	-	0.10
ddd	-	-	0.05
eee	-	-	0.08

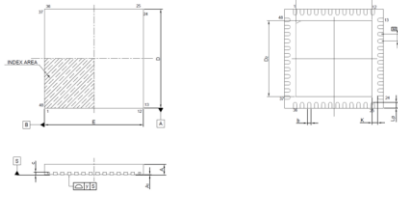
Dimension Comparison: 32pin HWQFN Package Drawing

Beijing Symbol	5x5mm 32pin HWQFN PWQN0032KJ-A			Greatek Symbol	5x5mm 32pin HWQFN PWQN0032KE-A			UTAC Symbol	5x5mm 32pin HWQFN PWQN0032KG-A		
	Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters		
	Min	Nom	Max		Min	Nom	Max		Min	Nom	Max
A	-	-	0.80	A	-	-	0.80	A	-	-	0.80
A1	0.00	-	0.05	A1	0.00	0.02	0.05	A1	0.00	-	0.05
c	-	0.20	-	A3	0.203 REF.			A3	0.20 REF.		
b	0.18	0.25	0.30	b	0.18	0.25	0.30	b	0.20	0.25	0.30
D	4.85	5.00	5.15	D	5.00 BSC			D	-	5.00	-
E	4.85	5.00	5.15	E	5.00 BSC			E	-	5.00	-
e	0.50 BSC			e	0.50 BSC			e	-	0.50	-
-	-	-	-	-	-	-	-	N	32		
Lp	0.35	0.40	0.45	L	0.35	0.40	0.45	L	0.30	0.40	0.50
K	0.20	-	-	K	0.20	-	-	K	0.20	-	-
D2	-	3.20	-	D2	3.15	3.20	3.25	D2	3.10	3.20	3.30
E2	-	3.20	-	E2	3.15	3.20	3.25	E2	3.10	3.20	3.30
-	-	-	-	aaa	0.15			aaa	-	-	0.15
-	-	-	-	bbb	0.10			bbb	-	-	0.10
-	-	-	-	ccc	0.10			ccc	-	-	0.10
-	-	-	-	ddd	0.05			ddd	-	-	0.05
y	-	-	0.08	eee	0.08			eee	-	-	0.08
-	-	-	-	fff	0.10			-	-	-	-

Beijing package symbols complied to JEITA standard.
Greatek and UTAC package symbols complied to JEDEC standard.

48pin HWQFN Package Drawing (Beijing)

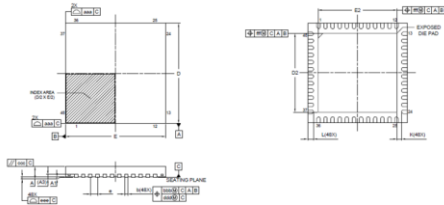
RENESAS Code : PWQN0048KH-B



Beijing Symbol	7x7mm 48pin HWQFN PWQN0048KH-B		
	Dimension in Millimeters		
	Min	Nom	Max
D	6.85	7.00	7.15
E	6.85	7.00	7.15
A	-	-	0.80
A1	0.00	-	0.05
b	0.18	0.25	0.30
e	0.50 BSC		
Lp	0.35	0.40	0.45
y	-	-	0.08
c	-	0.20	-
K	0.35	-	-
D2	-	5.40	-
E2	-	5.40	-

48pin HWQFN Package Drawing (Greatek)

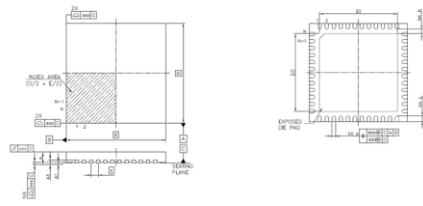
RENESAS Code : PWQN0048KE-A



Greatek Symbol	7x7mm 48pin HWQFN PWQN0048KE-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	0.02	0.05
A3	0.203 REF.		
b	0.20	0.25	0.30
D	7.00 BSC		
E	7.00 BSC		
e	0.50 BSC		
L	0.30	0.40	0.50
K	0.20	-	-
D2	5.50	5.55	5.60
E2	5.50	5.55	5.60
aaa	0.15		
bbb	0.10		
ccc	0.10		
ddd	0.05		
eee	0.08		
fff	0.10		

48pin HWQFN Package Drawing (UTAC)

RENESAS Code : PWQN0048KG-A



UTAC Symbol	7x7mm 48pin HWQFN PWQN0048KG-A		
	Dimension in Millimeters		
	Min	Nom	Max
A	-	-	0.80
A1	0.00	-	0.05
A3	0.20 REF.		
b	0.20	0.25	0.30
D	-	7.00	-
E	-	7.00	-
e	-	0.50	-
N	48		
L	0.30	0.40	0.50
K	0.20	-	-
D2	5.50	5.55	5.60
E2	5.50	5.55	5.60
aaa	-	-	0.15
bbb	-	-	0.10
ccc	-	-	0.10
ddd	-	-	0.05
eee	-	-	0.08

Dimension Comparison: 48pin HWQFN Package Drawing

Beijing Symbol	7x7mm 48pin HWQFN PWQN0048KH-B			Greatek Symbol	7x7mm 48pin HWQFN PWQN0048KE-A			UTAC Symbol	7x7mm 48pin HWQFN PWQN0048KG-A		
	Dimension in Millimeters				Dimension in Millimeters				Dimension in Millimeters		
	Min	Nom	Max		Min	Nom	Max		Min	Nom	Max
A	-	-	0.80	A	-	-	0.80	A	-	-	0.80
A1	0.00	-	0.05	A1	0.00	0.02	0.05	A1	0.00	-	0.05
c	-	0.20	-	A3	0.203 REF.			A3	0.20 REF.		
b	0.18	0.25	0.30	b	0.20	0.25	0.30	b	0.20	0.25	0.30
D	6.85	7.00	7.15	D	7.00 BSC			D	-	7.00	-
E	6.85	7.00	7.15	E	7.00 BSC			E	-	7.00	-
e	0.50 BSC			e	0.50 BSC			e	-	0.50	-
-	-	-	-	-	-	-	-	N	48		
Lp	0.35	0.40	0.45	L	0.30	0.40	0.50	L	0.30	0.40	0.50
K	0.35	-	-	K	0.20	-	-	K	0.20	-	-
D2	-	5.40	-	D2	5.50	5.55	5.60	D2	5.50	5.55	5.60
E2	-	5.40	-	E2	5.50	5.55	5.60	E2	5.50	5.55	5.60
-	-	-	-	aaa	0.15			aaa	-	-	0.15
-	-	-	-	bbb	0.10			bbb	-	-	0.10
-	-	-	-	ccc	0.10			ccc	-	-	0.10
-	-	-	-	ddd	0.05			ddd	-	-	0.05
y	-	-	0.08	eee	0.08			eee	-	-	0.08
-	-	-	-	fff	0.10			-	-	-	-

Beijing package symbols complied to JEITA standard.
Greatek and UTAC package symbols complied to JEDEC standard.

Marking Specifications

Marking position, characters, and characters size are examples for reference.

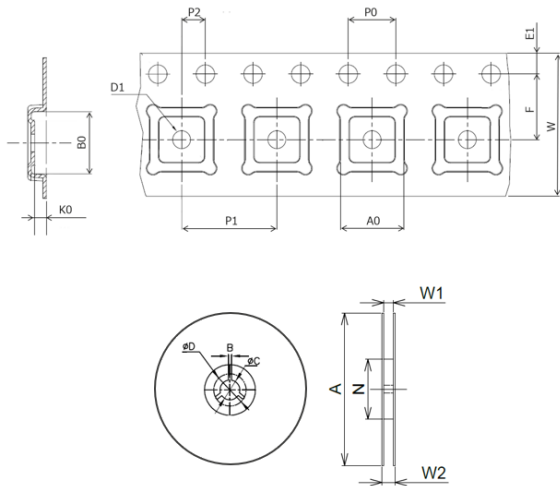
Assembly factory	Beijing (Additional)	Greatek (Existing)	UTAC (Existing)
24pin Blank Products			
	9 characters: product name 7 characters: Lot No. 5 characters: Internal code	9 characters: product name 7 characters: Lot No.	9 characters: product name 7 characters: Lot No.
32pin Blank Products			
	9 characters: product name 7 characters: Lot No. 5 characters: Internal code	9 characters: product name 7 characters: Lot No.	9 characters: product name 7 characters: Lot No.
48pin Blank Products			
	9 characters: product name 7 characters: Lot No. 5 characters: Internal code	9 characters: product name 7 characters: Lot No.	9 characters: product name 7 characters: Lot No.

Marking Photo

Marking position and character is reference example.
The color varies depending on the shooting conditions.

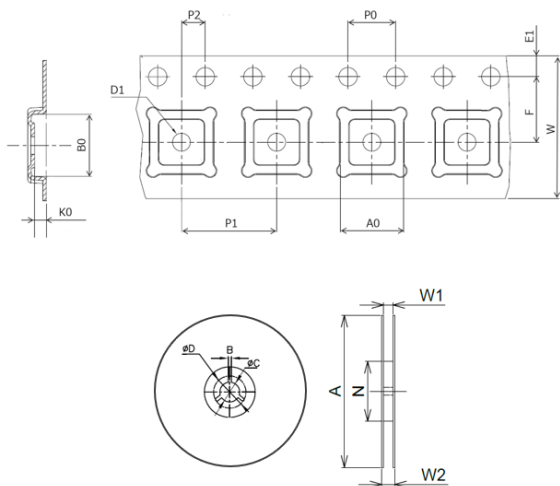
Assembly factory	Beijing (Additional)	Greatek (Existing)	UTAC (Existing)
Overall photo			
Enlarged photo			

Dimension Comparison: 24pin HWQFN Tape & Reel



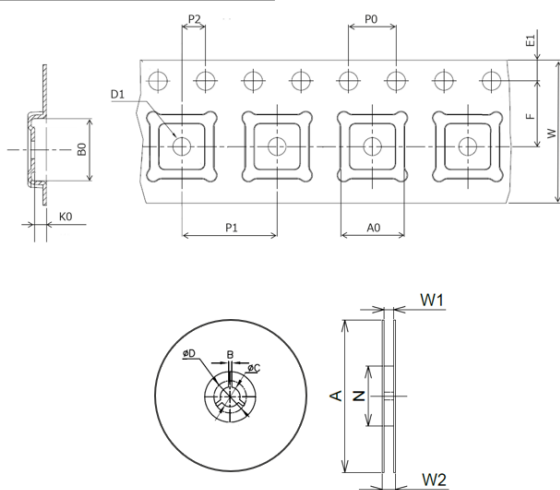
Tape Code		Additional	Existing	Existing
		E12*08-C2CA	ECQFN0404-A20	CP490/15
Tape Dimensions (mm)	A0	4.3	4.25	4.3
	B0	4.3	4.25	4.3
	K0	1.0	1.1	1.1
	P1	8.0	8.0	8.0
	W	12.0	12.0	12.0
	E1	1.75	1.75	1.75
	P0	4.0	4.0	4.0
	F	5.5	5.5	5.5
	P2	2.0	2.0	2.0
	D1	1.5	1.6	1.5
Reel Dimensions (mm)	B	2.0	2.0	1.5
	ΦC	13.0	13.0	13.0
	ΦD	21.0	21.0	20.2
	A	330	330	330
	N	100	102	100
	W1	13.5	12.8	12.4
	W2	17.5	18.4	18.4

Dimension Comparison: 32pin HWQFN Tape & Reel



Tape Code		Additional	Existing	Existing
		E12*08-B8CA	ECPKG0505-151	CP005/15-0
Tape Dimensions (mm)	A0	5.3	5.3	5.25
	B0	5.3	5.3	5.25
	K0	1.0	1.1	1.1
	P1	8.0	8.0	8.0
	W	12.0	12.0	12.0
	E1	1.75	1.75	1.75
	P0	4.0	4.0	4.0
	F	5.5	5.5	5.5
	P2	2.0	2.0	2.0
	D1	1.5	1.6	1.5
Reel Dimensions (mm)	B	2.0	2.0	1.5
	ΦC	13.0	13.0	13.0
	ΦD	21.0	21.0	20.2
	A	330	330	330
	N	100	102	100
	W1	13.5	12.8	12.4
	W2	17.5	18.4	18.4

Dimension Comparison: 48pin HWQFN Tape & Reel



Tape Code		Additional	Existing	Existing
		E16*12-B9CA	ACT-QFN0707-A410.PB	CP010/16
Tape Dimensions (mm)	A0	7.3	7.25	7.25
	B0	7.3	7.25	7.25
	K0	1.0	1.1	1.1
	P1	12.0	12.0	12.0
	W	16.0	16.0	16.0
	E1	1.75	1.75	1.75
	P0	4.0	4.0	4.0
	F	7.5	7.5	7.5
	P2	2.0	2.0	2.0
	D1	1.55	1.5	1.5
Reel Dimensions (mm)	B	2.0	2.0	1.5
	ΦC	13.0	13.0	13.0
	ΦD	21.0	21.0	20.2
	A	330	330	330
	N	100	102	100
	W1	17.5	16.8	16.4
	W2	21.5	22.4	22.4

4M changing points (Addition of assembly and sorting factory, Change of material)

Item	Check Result	Judgement
Machine	The machines are equivalent to present machines.	No risk
Method	The same as current products.	No risk
Man	Using operator certification system. Only certificated operator can work for the production.	No risk
Material	Only use certificated materials. The products has been certificated by reliability test same as existing products and have no risk.	No risk