

Product Change Notice (PCN)

Subject: Add assembly and testing site of USB3.0 Host/Hubb controller devices

Publication Date: 10/13/2021

Effective Date: 4/1/2022

Revision Description: Initial release

Description of Change:

For increasing production capability, we had decided that both Assembly and FT plant are added as following ways. Existing Assembly sites are ASE Shanghai or SPIL. PTI/Greatek (Powertech Technology Inc., Group_Greatek Electronics Inc.) will be added as new assembly site. Existing FT site is GTC (Global testing Corporation). Sigurd-UTC (Sigurd UTC Corporation) will be added as new FT site. Please see a below table about affected products. No change booking part number even if the above backend plant is added. the other changing items are shown as following table.

Comparison table

Item		New (Adding site)	Current1	Current2
Assembly	Assembly Company	PTI/Greatek	ASE Shanghai	SPIL
	Assembly Country	Taiwan	China	Taiwan
	Assembly location	Zhunan	Shanghai	Taichung
	Package outline	See Table. 1-1,1-2,1-3	See table. 1-1,1-2	See table 1-3
	Lead frame	Cu	Cu	Cu
	Molding material	Epoxy resin	Epoxy resin	Epoxy resin
	Outer lead plating	Pure Sn	Pure Sn	Pure Sn
	Wire bonding	Cu	Cu	Cu
	Die bond material	Ag paste	Ag paste	Ag paste
	Marking	Can be identified, see attachment file	Can be identified, see attachment file	Can be identified, see attachment file
Final test	Final testing Company	Sigurd-UTC	GTC	GTC
	Final testing Country	Taiwan	Taiwan	Taiwan
	Final testing location	Hsin-chu	Hsin-chu	Hsin-chu
Packing	Shipping form (Tray)	See Table.2-1, 2-2, 2-3	See Table.2-1, 2-2	See Table.2-3

Affected Product List:

Booking P/N	New site combination	Current site combination
UPD720201K8-701-BAC-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720201K8-711-BAC-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720202K8-701-BAA-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720202K8-711-BAA-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720210K8-BAF-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:SPIL, FT:GTC

Reason for Change:

For increasing production capability, we had decided that both Assembly and FT part is added as following ways.

Assembly: PTI/Greatek Powertech Technology Inc., Group_Greatek Electronics Inc.)

FT: Sigurd-UTC (Sigurd UTC Corporation)

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

Fit: There is a difference of dimension about Exposed-PAD size of UPD720210K8.

We judge that the impact on the customer's implementation is minor.

Form: None, Function: None, Quality & Reliability: No impact

Product Identification:

Changed products can be identified by the date code and marked on the package. Please see attachment file.

Qualification Status:3/1/2022 [Qualification Status]

Sample Availability Date: 1/31/2022

Device Material Declaration:1/31/2022 [Device Material Declaration]

USB-ASSP PCN changing points

Package outline, marking and IC Tray

Date : Oct. 11, 2021

Renesas Electronics Corporation

IOT Infrastructure Business Unit

Mobility, Infrastructure & IOT Power Business Division

Battery management, USB Department

Product Test Engineering & Product management Division

Analog product, PE/TE Department

Doc No. APTE4-BB-21-0007

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REASON FOR CHANGES

For increasing production capability, We had decided that both Assembly and FT part is added as following ways. Assembly: PTI/Greatek Powertech Technology Inc., Group_Greatek Electronics Inc.)

FT: Sigurd-UTC (Sigurd UTC Corporation) No change booking part number adding backend site's products,

The booking P/N is following ways

Booking P/N	New site combination	Current site combination
UPD720201K8-701-BAC-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720201K8-711-BAC-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720202K8-701-BAA-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720202K8-711-BAA-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:ASE-SH, FT:GTC
UPD720210K8-BAF-A	ASSY:Greatek, FT:Sigurd-UTC	ASSY:SPIL, FT:GTC

PCN Schedule

Sample Available: 1/30/2021

Qualification Status: 3/1/2022

MP Start: 4/1/2022

SUMMARY OF CHANGING POINTS IN THIS PCN

There are some changing points on USB-ASSP 2nd fab production related to customers.
If you need more detail information, please contact us.

Package outline: There is a difference of dimension about Exposed-PAD size of UPD720210K8.

We judge that the impact on the customer's implementation is minor. (See page-5)

REL will provide package outline drawing later. Please contact to us if you require them.

Marking: Can be identified by marking letters. Please see next page in page6-8

IC Tray: Adopting different IC Tray between existing site and new site.

Two type IC tray will be used for shipping forms. Pleas see in page9-11

PACKAGE OUTLINE SPECIFICATION

Table 1-1 UPD720201K8 package outline specification

Item	New	Current
Package type	68pin QFN w/ exposed pad	68pin QFN w/ exposed pad
Package size	8x8 mm	8x8 mm
Package thickness	Max 0.9mm	Max 0.9mm
Pin count	68pin	68pin
Pin pitch	0.4mm	0.4mm
Exposed-PAD size	Typ:6.2 x 6.2 mm	Typ:6.2 x 6.2 mm

Table 1-2 UPD720202K8 package outline specification





Item	New	Current
Package type	48pin QFN w/ exposed pad	48pin QFN w/ exposed pad
Package size	7x7mm	7x7mm
Package thickness	Max 0.9mm	Max 0.9mm
Pin count	48pin	48pin
Pin pitch	0.5mm	0.5mm
Exposed-PAD size	Typ:5.7x5.7mm	Typ:5.7x5.7mm

Table 1-3 UPD720210K8 package outline specification





Item	New	Current
Package type	76pin QFN w/ exposed pad	76pin QFN w/ exposed pad
Package size	9x9 mm	9x9 mm
Package thickness	Max 0.9mm	Max 0.9mm
Pin count	76pin	76pin
Pin pitch	0.4mm	0.4mm
Exposed-PAD size (*1)	Typ:5.2x5.2 mm	Typ:5.3x5.3 mm

(*1) There is a difference of dimension. We judge that the impact on the customer's implementation is minor.

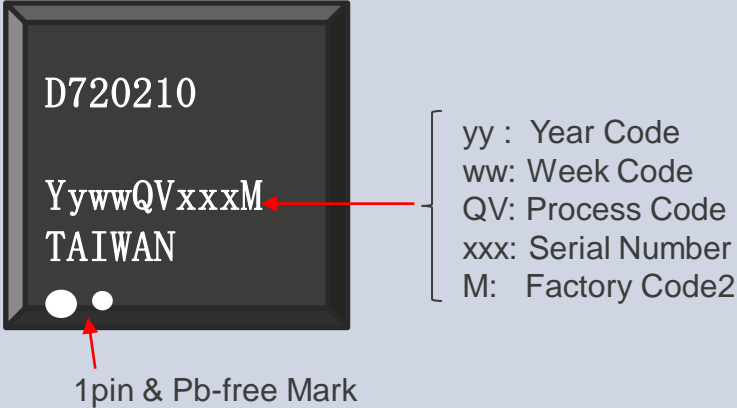
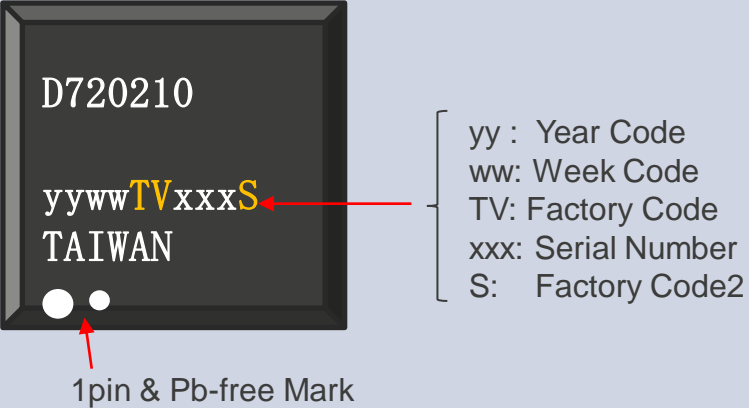
D720201K8 marking specification for new assembly site

	Current (ASE-SH)	New (PTI/ Greatek)
UPD720201K8-701-BAC-A	 <p>D720201 701 yywwQVxxxG CHINA</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2 	 <p>D720201 701 yywwTVxxxS TAIWAN</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2
UPD720201K8-711-BAC-A	 <p>D720201 711 yywwQVxxxG CHINA</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code QV: Process Code xxx: Serial Number G: Factory Code2 	 <p>D720201 711 yywwTVxxxS TAIWAN</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2

D720202K8 marking specification for new assembly site

	Current (ASE-SH)	New (PTI/ Greatek)
UPD720202K8-701-BAA-A	 <p>D720202 701 yywwQVxxxG CHINA</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2 	 <p>D720202 701 yywwTVxxxS TAIWAN</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2
UPD720202K8-711-BAA-A	 <p>D720202 711 yywwQVxxxG CHINA</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2 	 <p>D720202 711 yywwTVxxxS TAIWAN</p> <p>1pin & Pb-free Mark</p> <ul style="list-style-type: none"> yy : Year Code ww: Week Code TV: Process Code xxx: Serial Number S: Factory Code2

D720210K8 marking specification for new assembly site

	Current (SPIL)	New (PTI/ Greatek)
UPD720210K8-BAF-A	 <p>D720210</p> <p>YywwQVxxxM</p> <p>TAIWAN</p> <p>yy : Year Code ww: Week Code QV: Process Code xxx: Serial Number M: Factory Code2</p> <p>1pin & Pb-free Mark</p>	 <p>D720210</p> <p>yywwTVxxxS</p> <p>TAIWAN</p> <p>yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2</p> <p>1pin & Pb-free Mark</p>

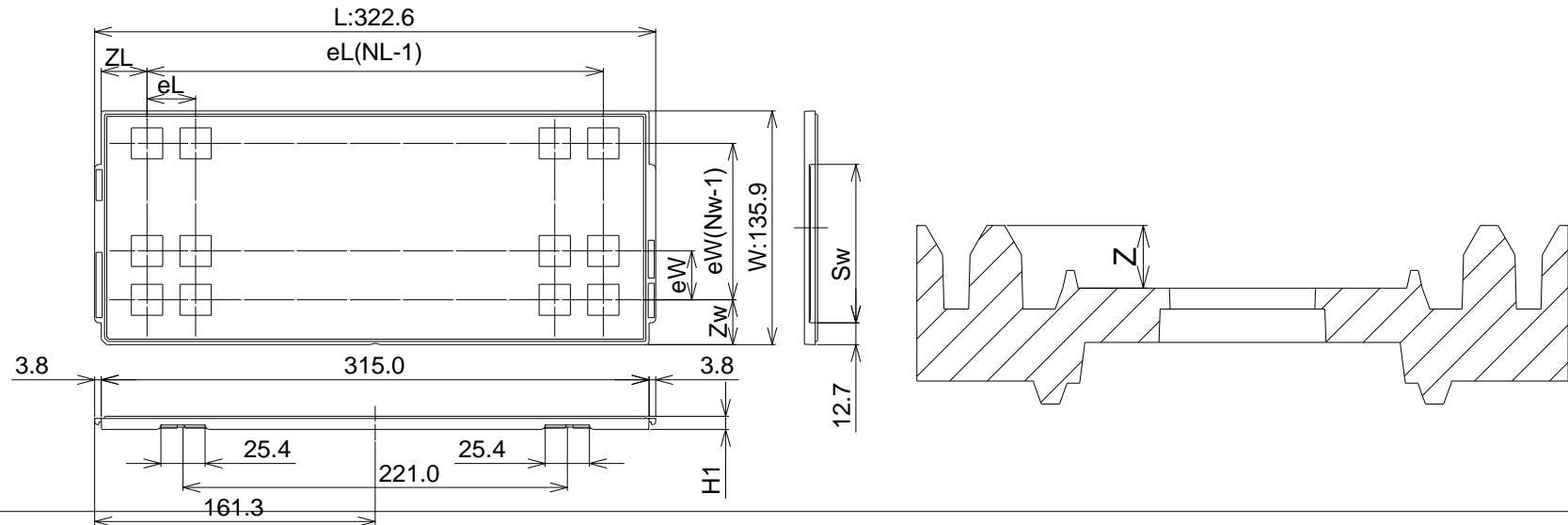
IC TRAY OF D720201

Table 2-1 UPD720201K8 IC Tray specification
ASH-SH(P/N JT5080801-01 REV.B)

Position dimension of cells	Z	1.8
	Zw	10.35
	ZL	10.00
	eW	12.80
	eL	11.80
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	10
	NL	26
Maximum storage No. IC/Tray		260
Material		PPE
Heat resistant temperature		150°C MAX
Surface resistance		$\geq 1.0 \times 10^5 \& < 1.0 \times 10^{12}$ ohm/sq

Greatek (P/N EA70808-10)

Position dimension of cells	Z	1.5
	Zw	10.75
	ZL	11.90
	eW	10.40
	eL	10.40
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	12
	NL	29
Maximum storage No. IC/Tray		348
Material		PPE
Heat resistant temperature		150°C MAX
Surface resistance		$1 \times 10^5 \sim 1 \times 10^{12}$ OHM/SQ



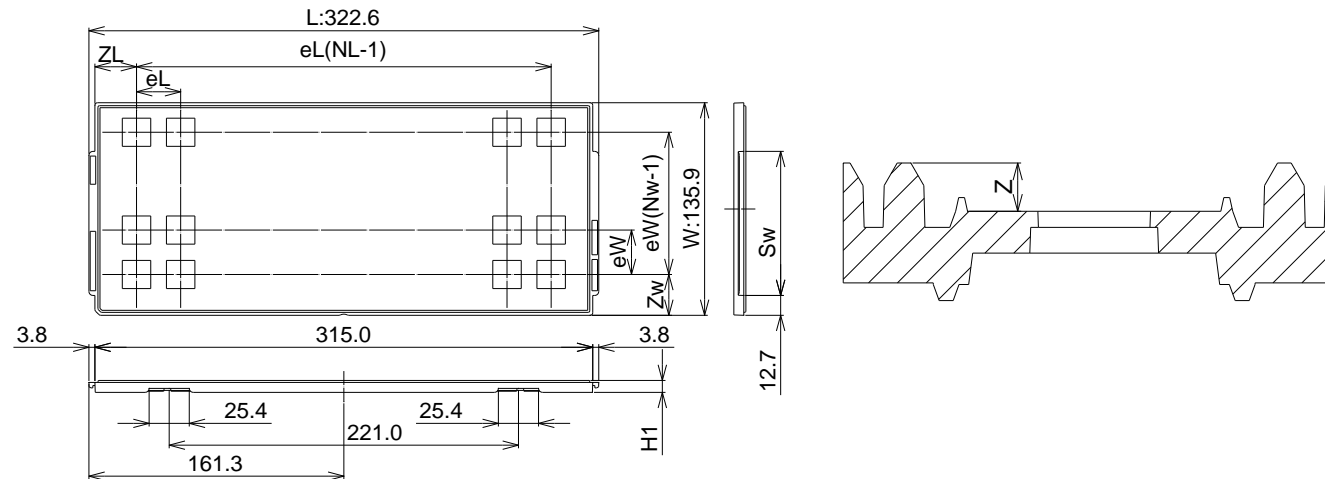
IC TRAY OF D720202

Table 2-2 UPD720202K8 IC Tray specification
ASH-SH(P/N JT50070701-01 REV.B)

Position dimension of cells	Z	1.8
	Zw	10.35
	ZL	10.00
	eW	12.80
	eL	11.80
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	10
	NL	26
Maximum storage No. IC/Tray		260
Material		PPE
Heat resistant temperature		150°C MAX
Surface resistance		$\geq 1.0 \times 10^5 \< 1.0 \times 10^{12}$ ohm/sq

Greatek(P/N EAG0707-10)

Position dimension of cells	Z	1.4
	Zw	11.55
	ZL	11.80
	eW	9.40
	eL	9.40
	Sw	92.1
Thickness (mm)	H1	7.62
Number of cells	Nw	13
	NL	32
Maximum storage No. IC/Tray		416
Material		PPE
Heat resistant temperature		150°C MAX
Surface resistance		$1 \times 10^5 \sim 9 \times 10^9$ OHM/SQ



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