



## Details of Change:

## Comparison Table:

Item		New (Adding site)	Current1	Current2
Assembly	Assembly-Company	PTI/Greatek	ASE-Shanghai	SPII
	Assembly-Country	Taiwan	China	Taiwan
	Assembly-location	Zhunan	Shanghai	Taichung
	Package-outline	See page-2	See page-2	See page-2
	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	See page-3	See page-3	See page-3
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 pages-4-5	See pages-4-5	See pages-4-5

## 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	78pin QFN w/ exposed pad	78pin QFN w/ exposed pad
Package size	9x9 mm	9x9 mm
Package thickness	Max 0.9mm	Max 0.9mm
Pin count	78pin	78pin
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.

**Marking Specification:**

	Current (ASE-SH)	New (PTI/ Greatek)
UPD720201K8-701-BAC-A	<p>yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>	<p>yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>
UPD720201K8-711-BAC-A	<p>yy : Year Code ww: Week Code QV: Process Code xxx: Serial Number G: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>	<p>yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>
UPD720202K8-701-BAA-A	<p>yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>	<p>yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>
UPD720202K8-711-BAA-A	<p>yy : Year Code ww: Week Code QV: Factory Code xxx: Serial Number G: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>	<p>yy : Year Code ww: Week Code TV: Process Code xxx: Serial Number S: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>
UPD720210K8-BAF-A	<p>yy : Year Code ww: Week Code QV: Process Code xxx: Serial Number M: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>	<p>yy : Year Code ww: Week Code TV: Factory Code xxx: Serial Number S: Factory Code2</p> <p>1pin &amp; Pb-free Mark</p>

IC Tray Specification:

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

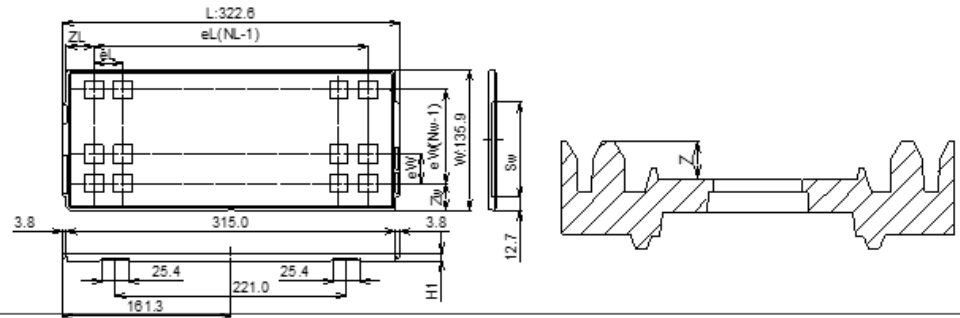


Table 2-2 UPD720202K8 IC Tray specification  
ASH-SH(P/N JT50070701-01 REV.B)

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

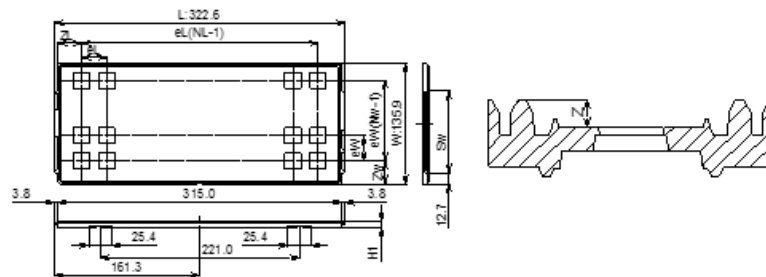
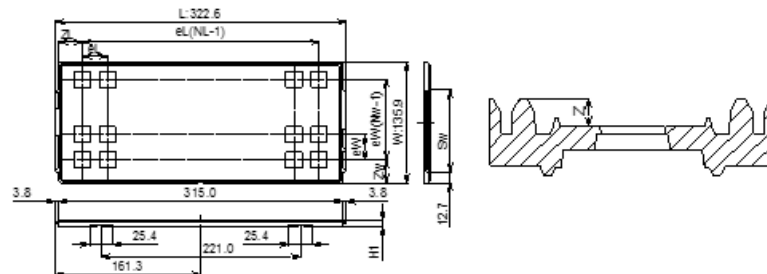


Table 2-3 UPD720210K8 IC Tray specification  
 SPIL(P/N 14L-0909-B19)

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		MPPO
Heat resistant temperature		150°C MAX
Surface resistance		$\geq 1.0 \times 10^5 \& \leq 1.0 \times 10^{11}$ ohm/sq

Greatek(P/N QJ-003)

Position dimension of cells	Z	1.55
	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 + Carbon Fiber
Heat resistant temperature		24 HOURS 150°C
Surface resistance		$1 \times 10^5 \sim 9 \times 10^9$ Ω/sq



### 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