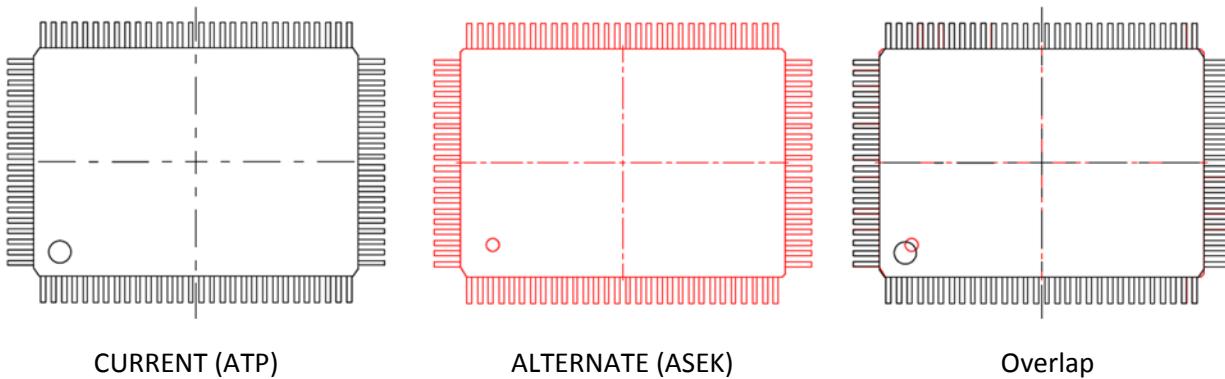


## EXTERNAL CHANGES

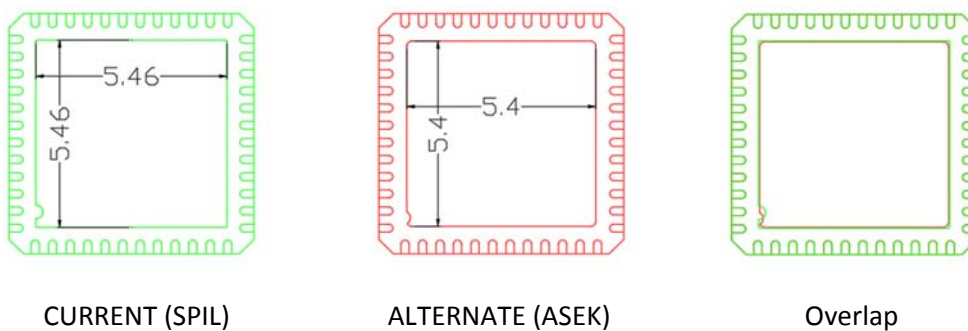
M4A5-128/64-xYNx, PQFP, 14 X 20mm, 100 leads



- Slight movement of pin 1 dot mark

Symbol	Lattice POD			ASEK POD		
	Min	Nom	Max	Min	Nom	Max
A	-	-	3.40	-	-	3.40
A1	0.25	-	0.50	0.25	-	0.50
A2	2.50	2.70	2.90	2.50	2.72	2.90
D		23.20 BSC			23.20 BSC	
D1		20.00 BSC			20 BSC	
E		17.20 BSC			17.20 BSC	
E1		14.00 BSC			14 BSC	
L	0.73	0.88	1.03	0.73	0.88	1.03
c	0.11	-	0.23	0.11	0.152	0.23

SI13531ACNU, Punched QFN, 7 X 7mm, 48 leads

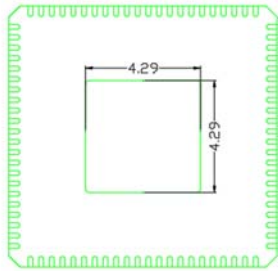


- Slight difference on nominal e-pad dimensions

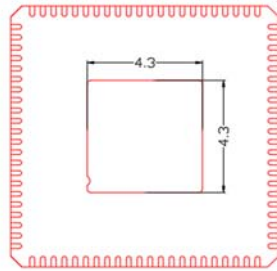
Symbol	Lattice POD			ASEK POD		
	Min	Nom	Max	Min	Nom	Max
e	0.50			0.50		
L	0.30	0.40	0.50	0.30	0.40	0.50
b	0.18	0.25	0.30	0.18	0.23	0.30
D2	5.31	5.46	5.61	5.31	5.40	5.50
E2	5.31	5.46	5.61	5.31	5.40	5.50
A	-	0.85	1.00	-	0.85	0.90

A1	0.00	0.02	0.05	0.00	0.02	0.05
A2	-	0.65	0.80	-	0.65	0.70
A3	0.20 REF			0.20 REF		
D	7.00 BSC			7.00 BSC		
D1	6.75 BSC			6.75 BSC		
E	7.00 BSC			7.00 BSC		
E1	6.75 BSC			6.75 BSC		
$\theta$	14°			0°	-	14°

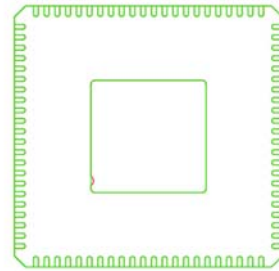
SII9533CNUC, Punched QFN, 10 X 10mm, 88 leads



CURRENT (SPIL)



ALTERNATE (ASEK)

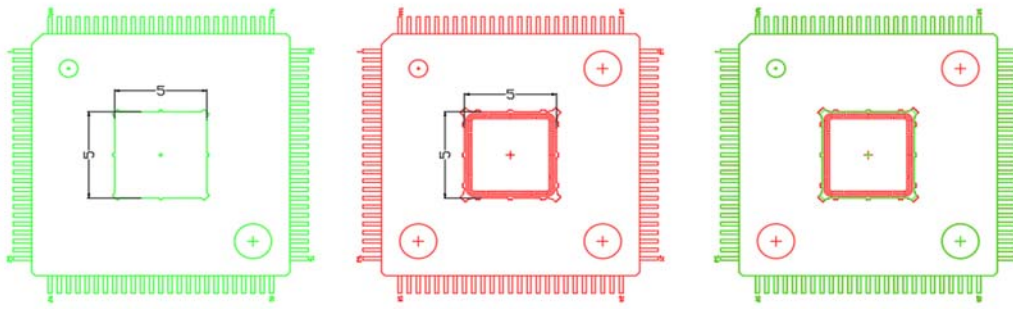


Overlap

- Slight difference on nominal e-pad dimensions

Item	Description	Lattice POD			ASEK POD		
		Min	Typ	Max	Min	Typ	Max
A	Thickness	0.80	0.85	0.90	0.80	0.85	0.90
A1	Stand-Off	0.00	0.02	0.05	0.00	0.02	0.05
A2	Body Thickness	0.60	0.65	0.70	0.60	0.65	0.70
A3	---	0.20 REF			0.20 REF		
b	Lead width (with plating)	0.15	0.20	0.25	0.15	0.18	0.25
D/E	Footprint	9.90	10.00	10.10		10 BSC	
D1/E1	Body size	9.75 BSC			9.75 BSC		
D2	---	4.14	4.29	4.44	4.20	4.30	4.40
E2	---	4.14	4.29	4.44	4.20	4.30	4.40
e	Lead pitch	0.40 BSC			0.40 BSC		
L	Lead foot length	0.30	0.40	0.50	0.30	0.40	0.50
$\theta$	---	0°	---	14°	0°	---	14°
R	---	0.075	---	---	0.075	---	---
aaa	---	0.10			0.10		
bbb	---	0.07			0.07		
ccc	---	0.10			0.10		
ddd	---	0.05			0.05		
eee	---	0.08			0.08		
fff	---	0.10			0.10		

**SI9535CTUC, TQFP, 14 X 14mm, 100 leads**



CURRENT (SPIL)

ALTERNATE (ASEK)

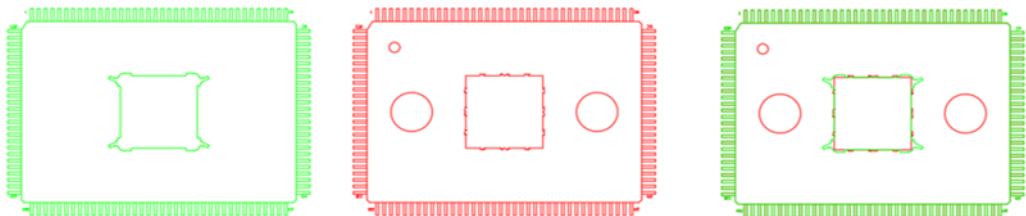
Overlap

- 2 additional ejector pin marks
- Minor difference on exposed pad periphery

Item	Description	Lattice POD			ASEK POD		
		Min	Typ	Max	Min	Typ	Max
A	Thickness	---	---	1.20	1.00	1.10	1.20
A1	Stand-Off	0.05	---	0.15	0.05	0.10	0.15
A2	Body Thickness	0.95	1.00	1.05	0.95	1.00	1.05
D	Footprint	16.00 BSC			15.90	16.00	16.10
D1	Body size	14.00 BSC			13.80	14.00	14.20
E	Footprint	16.00 BSC			15.90	16.00	16.10
E1	Body size	14.00 BSC			13.80	14.00	14.20
L	Lead foot length	0.45	0.60	0.75	0.45	0.60	0.75
L1	Total lead length	1.00 REF			1.00 REF		
R1	Lead radius, inside	0.08	---	---	0.08	---	---
R2	Lead radius, outside	0.08	---	0.20	0.08	---	0.20
S	Lead horizontal run	0.20	---	---	0.20	---	---
Θ	---	0°	3.5°	7°	0°	3.5°	7°
Θ1	---	0°	---	---	0°	---	---
Θ2	---	11°	12°	13°	11°	12°	13°
Θ3	---	11°	12°	13°	11°	12°	13°

**SI7172CLU LQFP, 14 X 20mm, 128 leads**

BOTTOM



TOP



CURRENT (ASECL)

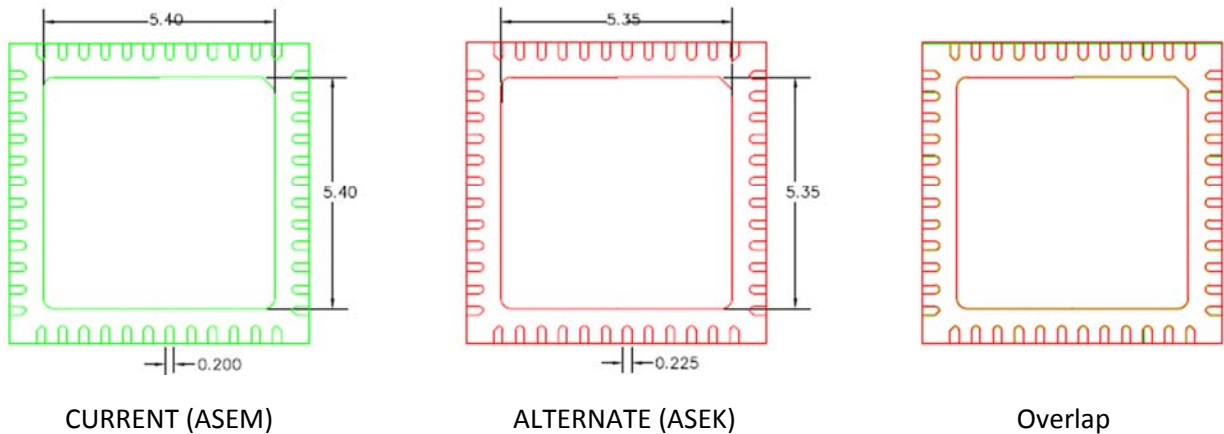
ALTERNATE (ASEK)

Overlap

- Slight differences on exposed pad periphery
- Two additional ejector pin marks and pin 1 dot (bottom) on ASEK version

Item	Description	Min	Typ	Max	Min	Typ	Max
A	Thickness	---	---	1.60	---	---	1.60
A1	Stand-off	0.05	---	0.15	0.05	---	0.15
A2	Body thickness	1.35	1.4	1.45	1.35	1.4	1.45
D1	Body size	20 BSC			20 BSC		
E1	Body size	14 BSC			14 BSC		
F1	Footprint	16 BSC			16 BSC		
G1	Footprint	22 BSC			22 BSC		
L1	Lead length	1.00 REF			1.00 REF		
c	Lead thickness	0.09	---	0.2	0.09	0.127	0.2

**iCE40UP5K-SG48**, Sawn QFN, 7 X 7mm, 48 leads



- Minor lead width difference
- Slight difference on exposed pad dimension

Symbol	Lattice POD			ASEK POD		
	Min	Nom	Max	Min	Nom	Max
A	0.80	0.90	1.00	0.80	0.90	1.00
A1	0.00	0.02	0.05	0.00	0.02	0.05
A3	0.2 REF			0.2 REF		
D	7.0 BSC			6.9	7.0	7.1
D2	5.30	5.40	5.50	5.20	5.35	5.50
E	7.0 BSC			6.9	7.0	7.1
E2	5.30	5.40	5.50	5.20	5.35	5.50
b	0.15	0.20	0.25	0.15	0.225	0.30
e	0.50 BSC			0.50 BSC		
L	0.35	0.40	0.45	0.35	0.40	0.45