



Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: A0808-02R2 DATE: 25-Aug-2010 Product Affected: VFQFP-N-64 and VFQFP-N-72 (Standard and Green) Date Effective: 27-Sep-2008	MEANS OF DISTINGUISHING CHANGED DEVICES: <input type="checkbox"/> Product Mark <input checked="" type="checkbox"/> Back Mark Lot # will have "U", "P", "D", "I", "Y" or <input type="checkbox"/> Date Code "CH" prefix. <input type="checkbox"/> Other
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Contact: Bimla Paul Title: Product Quality Assurance Phone #: (408) 574-6419 Fax #: (408) 284-8362 E-mail: Bimla.Paul@idt.com	Attachment: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Samples: Please contact your local sales representative for sample request & availability.
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DESCRIPTION AND PURPOSE OF CHANGE:

<input type="checkbox"/> Die Technology <input type="checkbox"/> Wafer Fabrication Process <input checked="" type="checkbox"/> Assembly Process <input type="checkbox"/> Equipment <input type="checkbox"/> Material <input type="checkbox"/> Testing <input checked="" type="checkbox"/> Manufacturing Site <input type="checkbox"/> Data Sheet <input type="checkbox"/> Other	<p>Revision 2: This revised PCN is to include package dimensions for VFQFP-N-72 for clarification and to update part# list per latest product availability.</p> <p>The PCN effective date remains unchanged.</p> <p>A copy of the Revision 1 is attached.</p>
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RELIABILITY/QUALIFICATION SUMMARY:
Refer to qualification data shown in page 17.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.

IDT reserves the right to ship either version manufactured after the process change effective date until the inventory on the earlier version has been depleted.

Customer: _____	<input type="checkbox"/> Approval for shipments prior to effective date.
Name/Date: _____	E-Mail Address: _____
Title: _____	Phone# /Fax# : _____

CUSTOMER COMMENTS: _____

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____ DATE: _____



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PRODUCT/PROCESS CHANGE NOTICE (PCN)

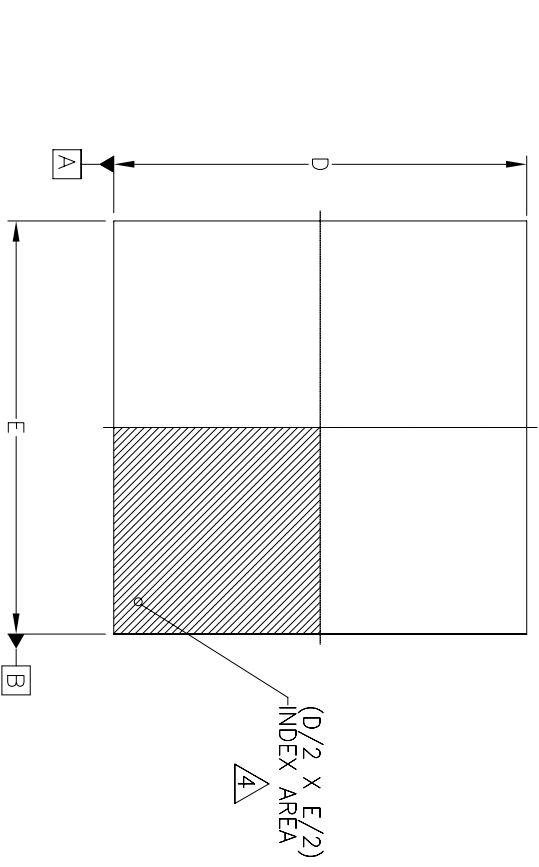
ATTACHMENT I - PCN #: A0808-02R2

Affected Part Number

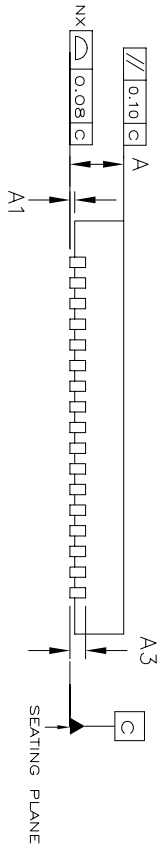
Part Number	Part Number	Part Number	Part Number
932S509HKLF	9ERS3165BKILFT	9LPRS356AKLF	9ZX21501CKLF
932S509HKLFT	9ERS3165BKLF	9LPRS356AKLFT	9ZX21501CKLFT
932S820CKLF	9ERS3165BKLF	9LPRS528CKLF/W	9ZX21901BKLF
932S820CKLFT	9EX21501AKILF	9LPRS914HKLF	9ZX21901BKLFT
932S890CKLF	9EX21501AKILFT	9LPRS914HKLFT	9ZX21901CKLF
932S890CKLFT	9EX21501AKLF	9LRS3165BKILF	9ZX21901CKLFT
932SQ420CKLF	9EX21501AKLFT	9LRS3165BKILFT	9FG1900AK-1LF
932SQ420CKLFT	9EX21531AKLF	9LRS3165BKLF	9FG1900AK-1LFT
9CPS4700AKLF	9EX21531AKLFT	9LRS3165BKLF	9FG1900BK-1LF
9CPS4700AKLFT	9EX21831AKLF	9LRS4880AKLF	9FG1900BK-1LFT
9DB1904BKLF	9EX21831AKLFT	9LRS4880AKLFT	9FG1900AK-2LF
9DB1904BKLFT	9LPRS134BKLF	9LVRS387AKLF	9FG1900AK-2LFT
9DB1933AKLF	9LPRS134BKLF	9LVRS387AKLFT	9FG1900AK-3LF
9DB1933AKLFT	9LPRS140AKLF	9VRS4818AKLF	9FG1900AK-3LFT
9EPRS488CKLF	9LPRS140AKLFT	9VRS4818AKLFT	
9EPRS488CKLFT	9LPRS140CKLF	9ZX21501BKLF	
9ERS3165BKILF	9LPRS140CKLFT	9ZX21501BKLFT	

Note 1: This is the newly added part# list based on latest product availability. Please refer to attached PCN Revision 1 for previously published part# list.

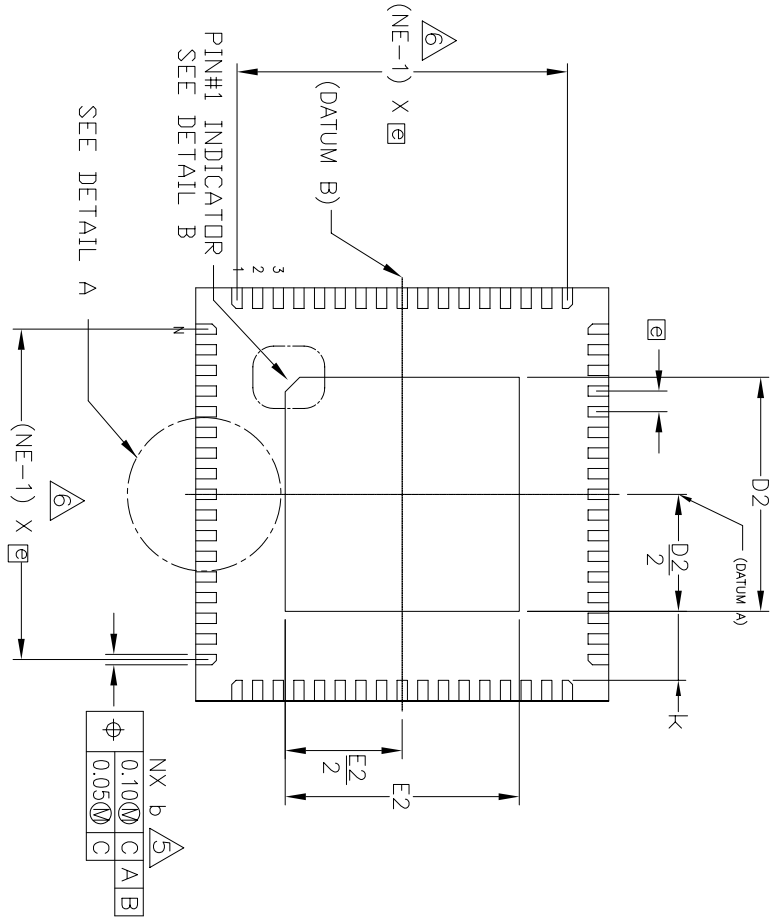
REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	03	CHANGED b DIM IN NL/72	05/06/05	PKP
	04	CHANGED D2 & E2	10/19/06	PKP
	05	ADDED 88-LEAD	08/30/07	PKP
	06	ADD PUNCH VERSION 5 PAGES	09/02/08	MA
	07	PUNCH VERSION UP-DATE: COMBINE PAGE 6 AND 7 TOGETHER ADD 64, 68 and 88L VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE TOOTH NUMBER TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MR



TOP VIEW



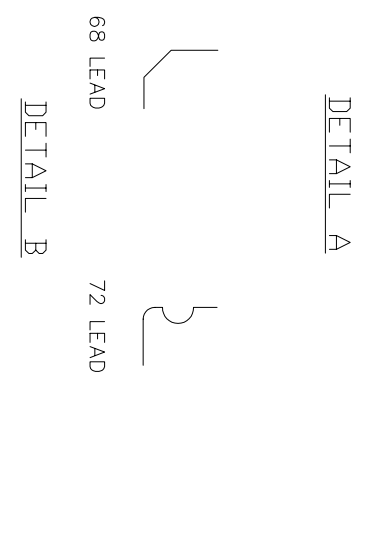
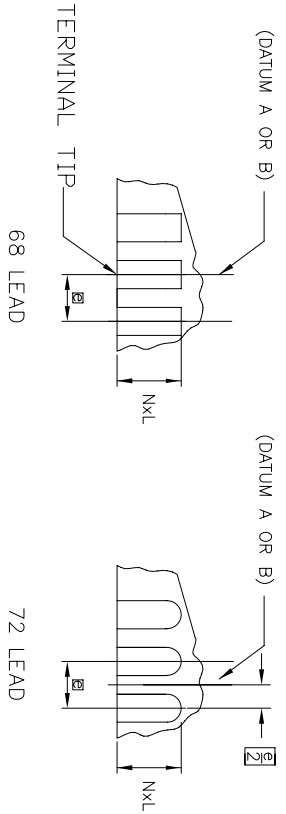
SIDE VIEW



BOTTOM VIEW

TOLERANCES UNLESS SPECIFIED			6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572
DECIMAL	±		
ANGULAR	±	www.IDT.com	
APPROVALS	DATE	TITLE	
DRAWN <i>DPY/p</i>	05/06/02	NL/NIG PACKAGE OUTLINE	
CHECKED		10.0 X 10.0 mm BODY	
		VFOFP-N	
SIZE	DRAWING No.	PSC-4111	REV
C			07
DO NOT SCALE DRAWING			SHEET 1 OF 7

REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
03	03	CHANGED b DIM IN NL72	05/06/05	PKP
04	04	CHANGED D2 & E2	10/19/06	PKP
05	05	ADDED 88-LEAD	08/30/07	PKP
06	06	ADD PUNCH VERSION 5 PAGES	09/02/08	MA
07	07	PUNCH VERSION UP-DATE: FIX DRAWING ON PAGE 4 COMBINE PAGE 6 AND 7 TOGETHER ADD 64, 68 and 88L VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE TOL FORM & POSITION TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MR



SAW VERSION:

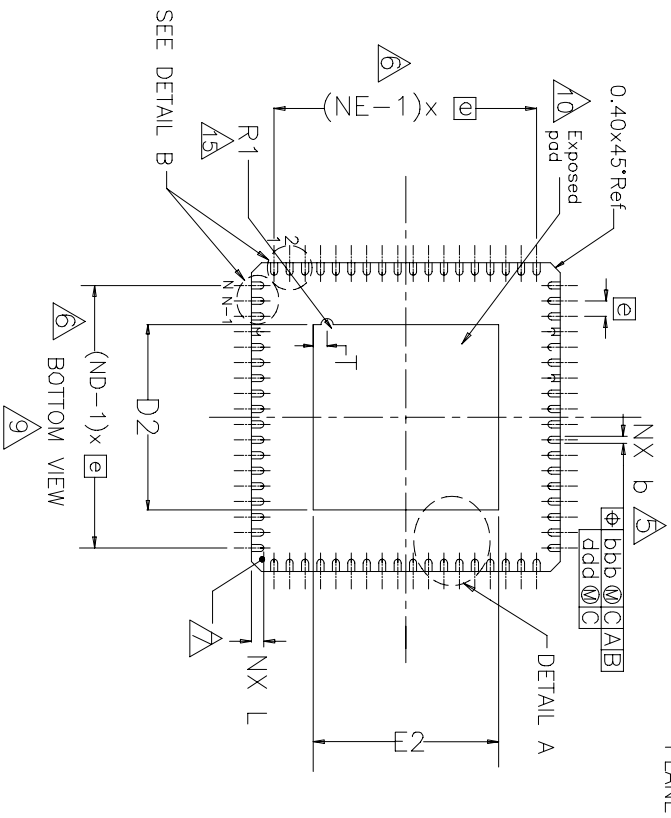
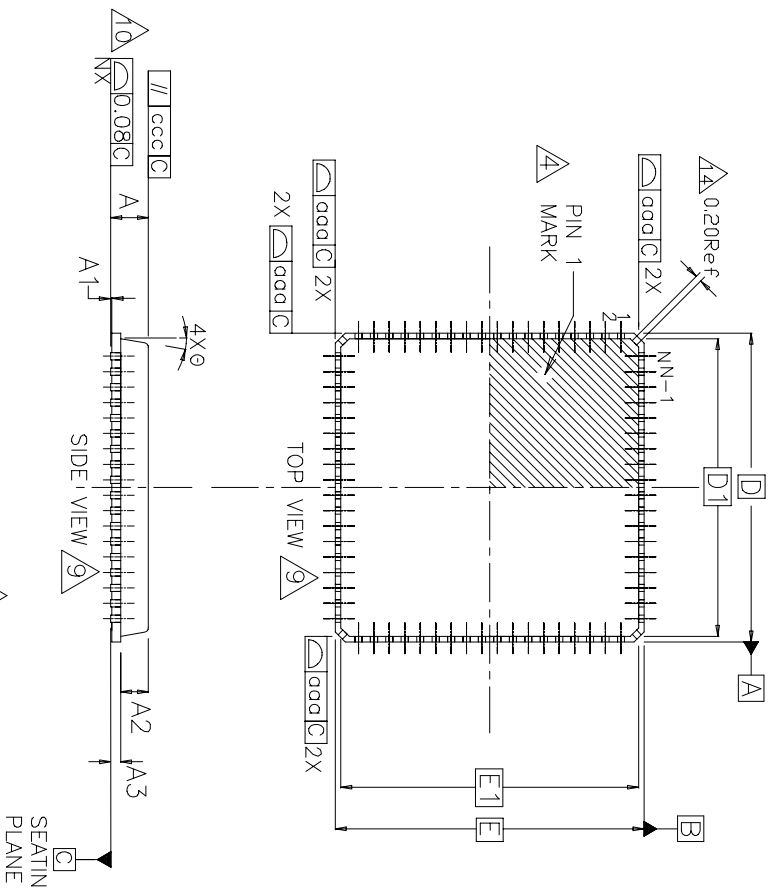
Symbol	NL68			NL72			NL88			No. of Terminals
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.	
A	0.80	0.90	1.00	0.80	0.90	1.00	0.80	0.90	1.00	
A1	0.00	0.02	0.05	0.00	0.02	0.05	0.00	0.02	0.05	
A3	0.20 REF.			0.20 REF.			0.20 REF.			
b	0.18	0.25	0.30	0.18	0.23	0.28	0.15	0.20	0.25	5
D	10.00 BSC			10.00 BSC			10.00 BSC			
E	10.00 BSC			10.00 BSC			10.00 BSC			
D2	SEE NOTE			5.85	6.00	6.15	7.95	8.10	8.25	8
E2	SEE NOTE			5.85	6.00	6.15	7.95	8.10	8.25	8
K	0.20	-	-	0.20	-	-	0.20	-	-	
L	0.45	0.50	0.55	0.35	0.40	0.45	0.30	0.40	0.50	
N	0.50 BSC			0.50 BSC			0.40 BSC			
Nd	68	72	88							6
Nd	17	18	22							6
Ne	17	18	22							6

NOTES:


- DIMENSIONING & TOLERANCING CONFORM TO ASME Y14.5M-1994.
- ALL DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.
- N IS THE TOTAL NUMBER OF TERMINALS.
Nd IS THE NUMBER OF TERMINALS IN X-DIRECTION &
Ne IS THE NUMBER OF TERMINALS IN Y-DIRECTION.
- THE TERMINAL #1 IDENTIFIER AND TERMINAL NUMBERING CONVENTION SHALL CONFORM TO JEDEC PUB. 95 SEC. 4.3 SPP-002. DETAILS OF TERMINAL #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE TERMINAL #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE.
- DIMENSION b APPLIES TO METALLIZED TERMINAL AND IS MEASURED BETWEEN 0.25mm AND 0.30mm FROM TERMINAL TIP.
- ND AND NE REFER TO THE NUMBER OF TERMINALS ON EACH D AND E SIDE RESPECTIVELY.
- DEPOPULATION IS POSSIBLE IN A SYMMETRICAL FASHION.
- DIMENSIONS D2 & E2 VARY DEPENDING ON DEVICE. SEE DEVICE DATASHEET.

TOLERANCES UNLESS SPECIFIED			6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572
DECIMAL	ANGULAR		
±	±	www.IDT.com	
APPROVALS	DATE	TITLE	
DRAWN <i>DPG/p</i>	05/06/02	NL/NLNG PACKAGE OUTLINE	
CHECKED		10.0 X 10.0 mm BODY	
		SIZE	DRAWING No.
		C	PSC-4111
			REV
			07

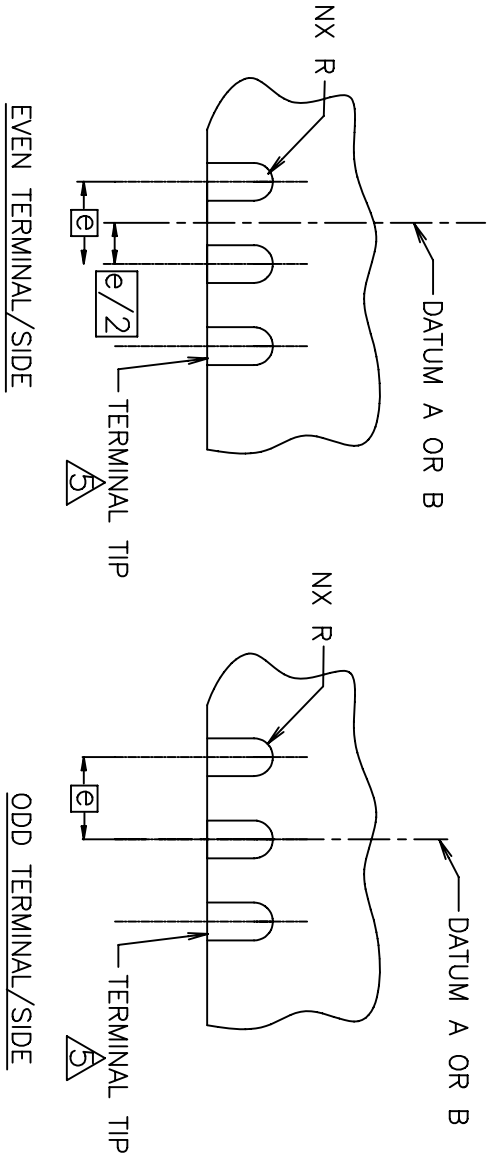
PUNCH VERSION:



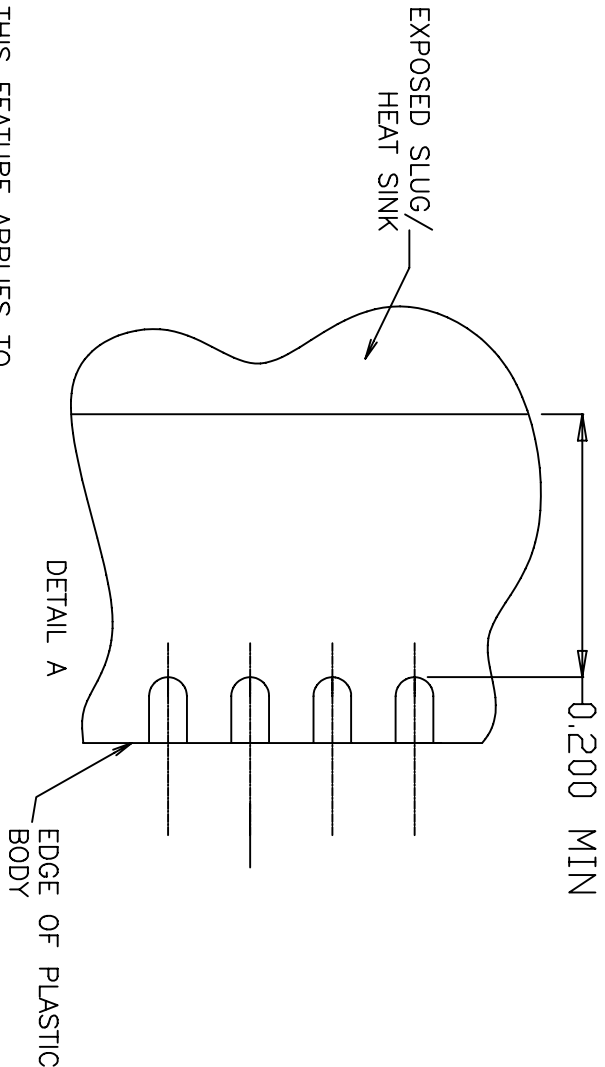
REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	03	CHANGED b DIM IN NL72	05/06/05	PKP
	04	CHANGED D2 & E2	10/19/06	PKP
	05	ADDED 88-LEAD	08/30/07	PKP
	06	ADD PUNCH VERSION 5 PAGES	09/02/08	MA
	07	PUNCH VERSION UP-DATE: FIX DRAWING ON PAGE 4 COMBINE PAGE 6 AND 7 TOGETHER ADD 64, 68 and 88L VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MR

TOLERANCES UNLESS SPECIFIED		 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572
DECIMAL	ANGULAR	
±	±	www.IDT.com APPROVALS DATE DRAIN 05/06/02 CHECKED
SIZE	DRAWING No.	TITLE
C	PSC-4111	NL/NLG PACKAGE OUTLINE
DO NOT SCALE DRAWING	SHEET 4 OF 7	REV 07

REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	03	CHANGED b DIM IN NL/72	05/06/05	RKP
	04	CHANGED D2 & E2	10/19/06	RKP
	05	ADDED 88-LEAD	08/30/07	RKP
	06	ADD PUNCH VERSION 5 PAGES	09/02/08	MA
	07	PUNCH VERSION UP-DATE: FIX DRAWING ON PAGE 4 COMBINE PAGE 6 AND 7 TOGETHER ADD 64, 68 and 88L VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE TOL FORM & POSITION TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MIR



DETAIL B



THIS FEATURE APPLIES TO ALL ENDS OF THE PKG.

TOLERANCES UNLESS SPECIFIED				6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572	
DECIMAL	ANGULAR	www.IDT.com			
XXX±	±	TITLE NL/NIG PACKAGE OUTLINE			
XXXX±		10.0 X 10.0 mm BODY			
APPROVALS	DATE	SIZE	DRAWING No.	PSC-4111	REV
DRAWN <i>DP/p</i>	05/06/02	C			07
CHECKED					
DO NOT SCALE DRAWING					
SHEET 5 OF 7					

PUNCH VERSION DIMENSIONS AND TOLERANCES

INDIVIDUAL DIMENSIONS

SYMBOL	VARIATION				NOTES
	NL/NLG64	NL/NLG68	NL/NLG72	NL/NLG88	
b	MIN	0.18	0.18	0.18	0.15
	NOM	0.25	0.25	0.25	0.20
	MAX	0.30	0.30	0.30	0.25
D BSC	10.00	10.00	10.00	10.00	
E BSC	10.00	10.00	10.00	10.00	
D1 BSC	9.75	9.75	9.75	9.75	
E1 BSC	9.75	9.75	9.75	9.75	
D2	MIN	3.75	3.75	5.50	6.60
	NOM	7.70	7.70	6.00	6.75
	MAX	8.25	8.25	6.50	6.90
E2	MIN	3.75	3.75	5.50	6.60
	NOM	7.70	7.70	6.00	6.75
	MAX	8.25	8.25	6.50	6.90
L	MIN	0.45	0.45	0.30	0.30
	NOM	0.55	0.55	0.40	0.40
	MAX	0.65	0.65	0.50	0.50
e BSC	0.5	0.5	0.5	0.4	
N	64	68	72	88	3
ND	16	17	18	22	6
NE	16	17	18	22	6
NOTES	1,2,9	1,2,9	1,2,9	1,2,9	

REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	03	CHANGED B DIM IN NL/2	05/06/08	PKP
	04	CHANGED D2 & E2	10/19/08	PKP
	05	ADDED 88-LEAD	08/30/07	PKP
	06	ADD PUNCH VERSION 5 PAGES	08/02/08	MA
	07	FIX DRAWING ON PAGE 4 TOGETHER WITH PUNCH VERSION 5 PAGES AND ADD 64, 66 and 68. VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MR

COMMON DIMENSIONS			
SYMBOL	MIN	NOM	MAX
A	0.80	0.90	1.00
A1	0	0.02	0.05
A2	0	0.65	1.00
A3 REF	-	0.20 ref	-
φ	0	-	14
T ref.	-	0.45	-
R1	-	0.20	-
R ref. b min/2	-	-	-
NOTES	1,2		

TOLERANCE OF FORM & POSITION			
SYMBOL	pitch	0.40mm	0.50mm
qqq	0.10	0.15	
bbb	0.07	0.10	
ccc	0.10	0.10	
ddd	0.05	0.05	
NOTES	1,2		

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR XXXX ± XXXX ±		IDT 6024 Silver Creek Valley Rd San Jose, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-5572 www.IDT.com	
APPROVALS / DATE DRAWN: P2/P2 05/08/08 CHECKED:	TITLE: NL/NLG PACKAGE OUTLINE 10.0 X 10.0 mm BODY WFOFP-N	SIZE: C DRAWING No.: PSC-4111	REV: 07 SHEET: 6 OF 7
DO NOT SCALE DRAWING			

Note:

1. Dimensioning and tolerancing conform to ASME Y14.5M-1994.
2. All dimensions are in millimeters . All angles are in degrees.
3. N is the total number of terminals.

△4. The terminal #1 identifier and terminal numbering convention shall conform to JESD 95-1 SPP-012.Details of terminal #1 identifier are optional , but must be located within the zone indicated.The terminal #1 identifier may be a molded, marked, or metalized features.

△5. Dimensions b apply to metalized terminal and is measured between 0.15 and 0.30mm from terminal tip.

△6. ND refer to the maximum number of terminals on D and E side.

△7. Depopulation is possible in a symmetrical fashion.

△8. N/A

△9. For a complete set of dimensions for each variation, see the individual variation and the common dimensions and tolerances on page 6

△10. Coplanarity applies to the exposed heat sink slug as well as the terminals.

△11. When more than one variation (option) exists for the same profile height, body size (D x E), and pitch, then those variations will be denoted by an additional dash number (ie: -1, -2, etc.) designator to identify them. The new variations would be created from all or any of the following reasons lead counts, terminal lengths, and or thermal pad sizes.

12. Variation comply to JEDEC MO-220.


13. A3 is measured at side of the package in between two adjacent leads.

14. Tie bar option could be exposed or hidden.

△15. The exact shape of this feature varies.

REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	03	CHANGED b DIM IN NL72	05/06/05	PKP
	04	CHANGED D2 & E2	10/19/06	PKP
	05	ADDED 88-LEAD	08/30/07	PKP
	06	ADD PUNCH VERSION 5 PAGES	09/02/08	MA
	07	PUNCH VERSION UP-DATE: FIX DRAWING ON PAGE 4 COMBINE PAGE 6 AND 7 TOGETHER ADD 64, 68 and 88L VARIANT ON PAGE 6 UPDATE COMMON DIMENSION TABLE PAGE 6 UPDATE TOL FORM & POSITION TABLE PAGE 6 UPDATE NOTE ON PAGE 7	05/17/10	MR

TOLERANCES UNLESS SPECIFIED		DATE		REV	
DECIMAL	ANGULAR				
XX±	±				
XXXX±					
XXXX±					
APPROVALS	DATE	TITLE	DRAWING No.	SIZE	REV
DRAWN <i>DPG/p</i>	05/06/02	NL/NLG PACKAGE OUTLINE	V/QFP-N	C	07
CHECKED					
		DO NOT SCALE DRAWING		SHEET 7 OF 7	



6024 Silver Creek Valley Rd
San Jose, CA 95138
PHONE: (408) 284-8200
FAX: (408) 284-5572

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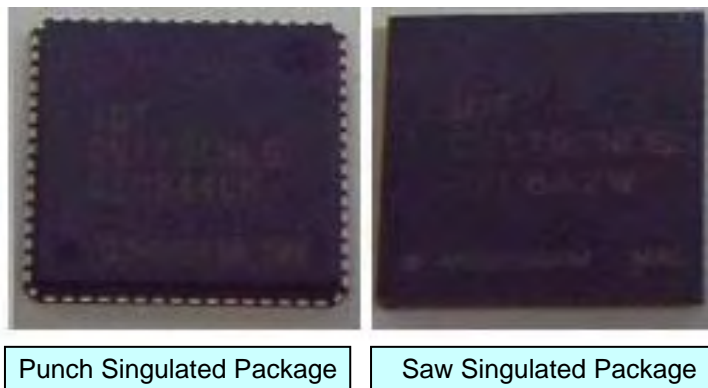
PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN # : A0808-02R1

PCN Type: Manufacturing Site - Alternate Assembly Location & Assembly Process
Data Sheet Change: None
No change in moisture sensitivity level (MSL)

Detail Of Change:

Revision 1: This revised notification is to add information that lots assembled by Chipmos, Taiwan are punch singulated. There are no changes to land pad design and moisture sensitive level. However, there is a difference in the physical appearance of the package as shown in the picture below.

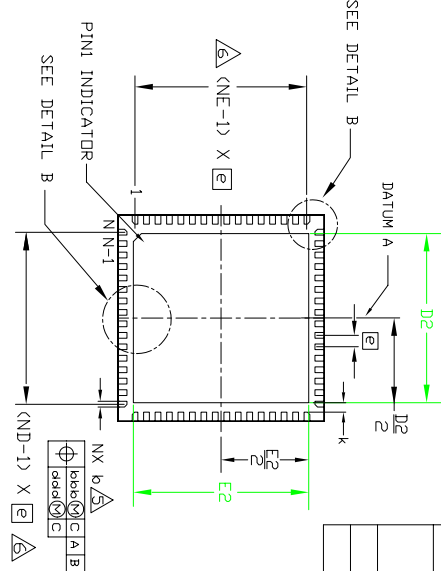
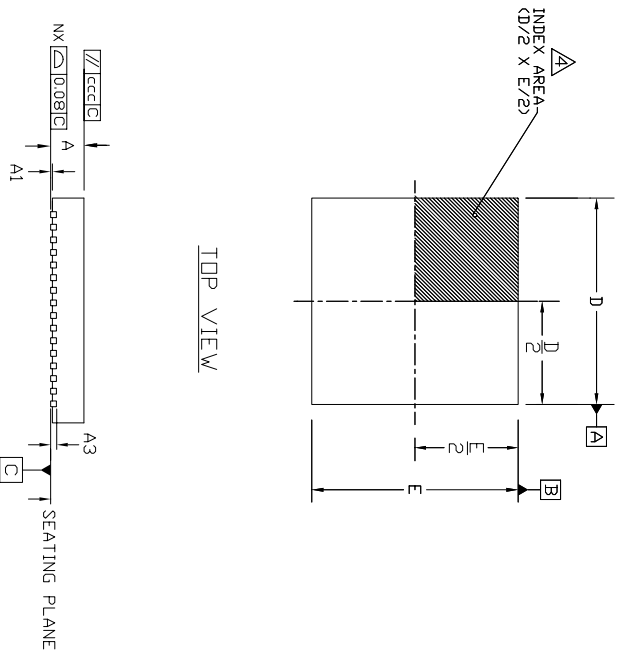


Refer to Page 3 to 5 for the package drawing showing the saw and punch singulation dimensions.

Lots assembled by other assembly facilities, UTL, Thailand ; Amkor, Korea ; Amkor, Philippines are in saw singulation.

The PCN effective date remains unchanged, 27-Sep-2008.

OPTION 1 SAW VERSION

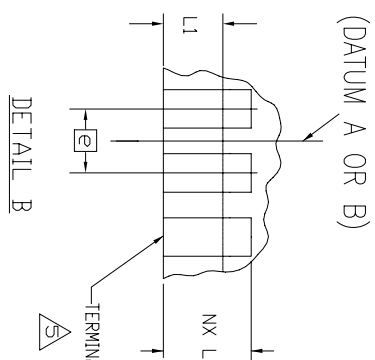
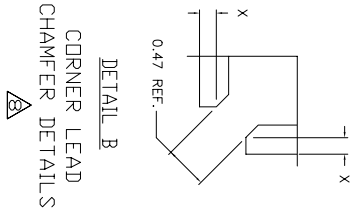


BOTTOM VIEW

SIDE VIEW

NOTES:

1. DIMENSIONING & TOLERANCING CONFORM TO ASME Y14.5M-1994.
2. ALL DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.
3. N IS THE TOTAL NUMBER OF TERMINALS.
4. THE TERMINAL #1 IDENTIFIER AND TERMINAL NUMBERING CONVENTION SHALL CONFORM TO JEDEC PUBLICATION 95 SPP-002. DETAILS OF TERMINAL #1 IDENTIFIER ARE OPTIONAL, BUT MUST BE LOCATED WITHIN THE ZONE INDICATED. THE TERMINAL #1 IDENTIFIER MAY BE EITHER A MOLD OR MARKED FEATURE.
5. DIMENSION b APPLIES TO METALLIZED TERMINAL AND IS MEASURED BETWEEN 0.25mm AND 0.30mm FROM TERMINAL TIP.
6. ND AND NE REFER TO THE NUMBER OF TERMINALS ON EACH D AND E SIDE RESPECTIVELY.
7. DEPOPULATION IS POSSIBLE IN A SYMMETRICAL FASHION.
8. CORNER LEAD CHAMFERS ARE APPLIED TO MAINTAIN MINIMUM CORNER LEAD SPACING (8 PLACES).



REVISIONS

DCN	REV	DESCRIPTION	DATE	APPROVED
00	00	INITIAL RELEASE	01/12/05	PKP
01	01	CHANGE D2 AND E2 TO FOLLOW JEDEC GUIDELINE	08/18/06	TU VU
02	02	ADD OPTION 2	09/03/08	R. TOR
03	03	ADD PUNCH VERSION PAGE 3	01/07/09	R. TOR

OPTION 1

OPTION 2

PACKAGE	64L 9.0x9.0 - 0.50		
REF.	MIN.	NOM.	MAX.
A	0.80	0.90	1.00
b	0.18	0.25	0.30
D	8.90	9.00	9.10
D2	-	-	7.80
E	8.90	9.00	9.10
E2	-	-	7.80
e	-	0.50 BSC.	-
L	0.35	0.40	0.45
N	-	64	-
ND	-	16	-
NE	-	16	-
K	0.25	-	-

PACKAGE	64L 9.0x9.0 - 0.50		
REF.	MIN.	NOM.	MAX.
A	0.80	0.90	1.00
b	0.18	0.25	0.30
D	-	9.00 BSC.	-
D2	7.00	7.15	7.25
E	-	9.00 BSC.	-
E2	7.00	7.15	7.25
e	-	0.50 BSC.	-
L	0.30	0.40	0.50
N	-	64	-
ND	-	16	-
NE	-	16	-
K	0.20	-	-

	MIN.	NOM.	MAX.
A1	0	0.02	0.05
A3	-	0.20 REF.	-
X	b/2	-	-

bbb	0.10
ccc	0.10
ddd	0.05

TOLERANCES UNLESS SPECIFIED

DECIMAL ANGULAR ±1°

XX.X .05

XXX.X .030

APPROVALS DATE

DRAWN 11/04/04

CHECKED

TITLE NLI/NLG PACKAGE OUTLINE

9.0 x 9.0 mm BODY

VFOFP-N

www.IDT.com

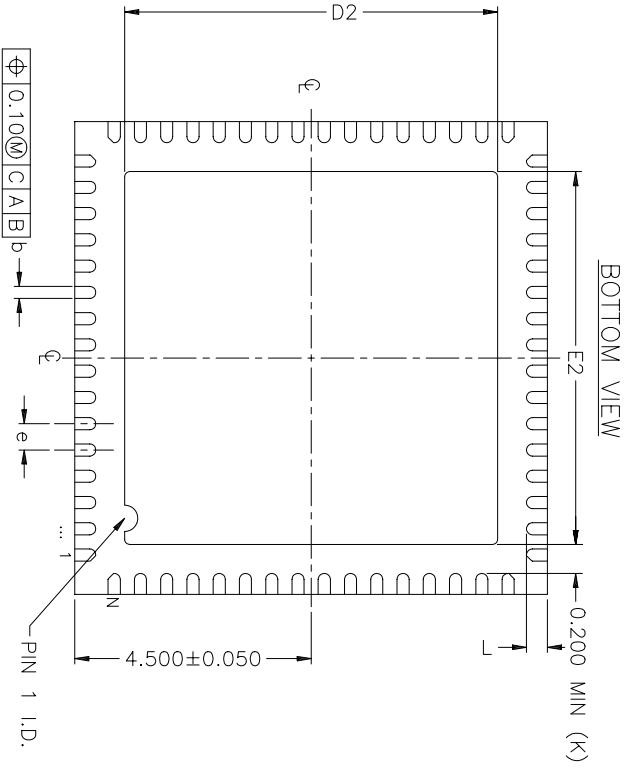
6024 SILVER CREEK VALLEY ROAD, SAN JOSE, CA 95138

PHONE: (408) 284-8200

FAX: (408) 284-3572

SIZE	DRAWING No.	REV
C	PSC-4147	03
DO NOT SCALE DRAWING		SHEET 1 OF 3

OPTION 2

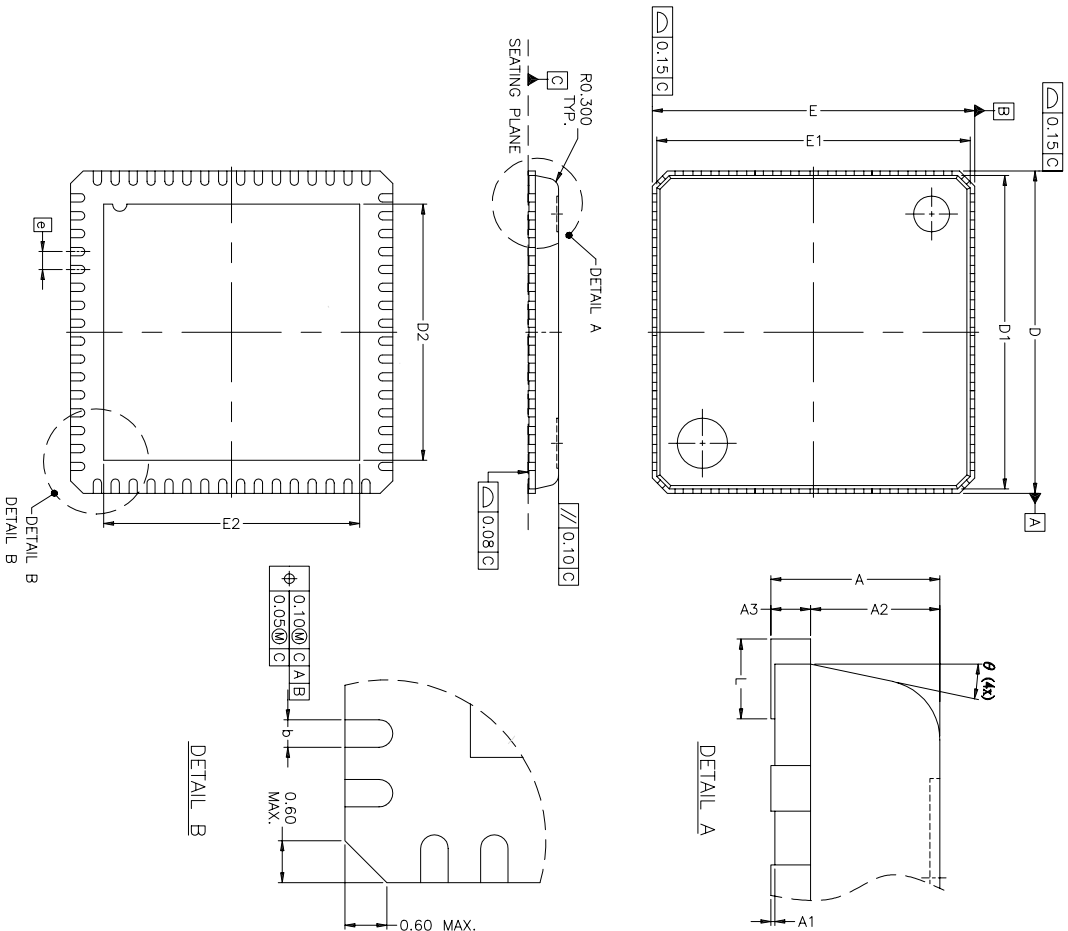


REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	00	INITIAL RELEASE	01/12/05	PKP
	01	CHANGE D2 AND E2 TO FOLLOW JEDEC GUIDELINE	08/18/06	TU VU
	02	ADD OPTION 2	09/03/08	R TOR
	03	ADD PUNCH VERSION PAGE 3	01/07/09	R TOR

NOTE :
1. DRAWING CONFORMS TO JEDEC REFERENCE MO-220 REV. 1 VARIATION VMMD-4

TOLERANCES UNLESS SPECIFIED DECIMAL ANGULAR ±1° XX± .105 XXX± .030		6024 SILVER CREEK VALLEY ROAD, SAN JOSE, CA 95138 PHONE: (408) 284-8200 FAX: (408) 284-3572	
TITLE NLI/NLG PACKAGE OUTLINE 9.0 x 9.0 mm BODY VFQFP-N		IDT www.IDT.com	
APPROVALS	DATE	SIZE	DRAWING No.
CHECKED	11/04/04	C	PSC-4147
DO NOT SCALE DRAWING		REV	03
		SHEET	2 OF 3

PUNCH VERSION



SYMBOL	DIMENSION (MM)			DIMENSION (MIL)		
	MIN.	NOM.	MAX.	MIN.	NOM.	MAX.
A	0.80	0.85	1.00	31	33	39
A1	0.00	0.02	0.05	0	1	2
A2	-	0.65	1.00	-	26	39
A3	-	0.20	-	-	8	-
b	0.18	0.25	0.30	7	10	12
D	9.00 BSC			354 BSC		
D1	8.75 BSC			344 BSC		
D2	7.00	7.15	7.25	276	281	285
E	9.00 BSC			354 BSC		
E1	8.75 BSC			344 BSC		
E2	7.00	7.15	7.25	276	281	285
e	0.50 BSC			20 BSC		
L	0.30	0.40	0.50	12	16	20
θ	0°	-	14°	0°	-	14°

- NOTE :
- REFER TO JEDEC STD: MO-220.
 - DIMENSION "b" APPLIES TO METALLIZED TERMINAL AND IS MEASURED BETWEEN 0.15MM AND 0.30MM FROM THE TERMINAL TIP. IF THE TERMINAL HAS OPTIONAL RADIUS ON THE OTHER END OF THE TERMINAL, THE DIMENSION B SHOULD NOT BE MEASURED IN THAT RADIUS AREA.

REVISIONS				
DCN	REV	DESCRIPTION	DATE	APPROVED
	00	INITIAL RELEASE	01/12/05	PKP
	01	CHANGE D2 AND E2 TO FOLLOW JEDEC GUIDELINE	08/18/06	TU VU
	02	ADD OPTION 2	09/03/08	R TOR
	03	ADD PUNCH VERSION PAGE 3	01/07/09	R TOR

TOLERANCES UNLESS SPECIFIED		6024 SILVER CREEK VALLEY ROAD, SAN JOSE, CA 95138	
DECIMAL	ANGULAR	PHONE: (408) 284-8200	
XX± .105	±1°	FAX: (408) 284-3572	
XXX± .030		www.IDT.com	
APPROVALS	DATE	TITLE NL/NLG PACKAGE OUTLINE	
DRAWN 0x00	11/04/04	9.0 x 9.0 mm BODY	
CHECKED		VFQFP-N	
SIZE	DRAWING No.	REV	
C	PSC-4147	03	
DO NOT SCALE DRAWING		SHEET 3 OF 3	



PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN # : A0808-02

PCN Type: Manufacturing Site - Change of Assembly Location
Data Sheet Change: None
 No change in moisture sensitivity level (MSL)

Detail Of Change:

This notification is to advise our customers that IDT is adding UTL, Thailand ; Amkor, Korea ; Amkor, Philippines and Chipmos, Taiwan as alternate assembly facilities for VFQFP-N-64 and VFQFP-N-72, both standard and green version. There is no change to the moisture performance of these packages using the assembly material set as listed in the below table.

Attachment II shows the affected part numbers.

Sample Availability:

Samples for each package type are available for customer evaluation, but may not be available for all devices.
 Please contact your local IDT sales representative for your sample request and availability.

Qualification Information and Qualification Data:

Affected Packages: VFQFP-N-64 and VFQFP-N-72
Assembly Material: See Table below

Description	Existing	Add
Assembly Location	ASAT, China ; PT Unisem, Indonesia ; Carsem, Malaysia	UTL, Thailand ; Amkor, Korea ; Amkor, Philippines ; Chipmos, Taiwan
Assembly Materials	Die Attach: 2200 / CRM1066C / QMI519	8600; 8290; AMK-06; CRM1076
	Wire: Au wire	Au wire
	Mold Compound: G770	G770; G700; G7470
	Lead Frame: Copper Alloy	Copper Alloy
	Plating: Sn/Pb (standard) and matte 100% Sn (green)	Sn/Pb (standard) and matte 100% Sn (green)



Integrated Device Technology, Inc.
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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN # : A0808-02

Test Vehicle: VFQFP-N-64 and VFQFP-N-72

Qualification Test Plan and Results:

Test Description	Test Method (Latest specs in effect)	Test Results (SS/Rej)	
		VFQFP-N-64	VFQFP-N-72
* Temperature Cycling (-65°C to +150°C, 500 cycles)	JESD22-A104	45/0	45/0
* Unbiased HAST (85°C, 85% RH, 100 hours)	JESD22-A118	45/0	45/0
* Auto Clave (121°C, 100% RH, 2 ATM, 96 hours)	JESD22-A102	45/0	45/0
Moisture Sensitivity Classification (L3)	J-STD-020	45/0	45/0

Note: * Test require moisture pre-conditioning sequence per JESD22-A113.



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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT II - PCN # : A0808-02

Affected Part Number for VFQFP-N-64

Part Number	Part Number	Part Number	Part Number
ICS954309BKLF	ICS9LPR800CKLFT	ICS9LPRS471AKLFT	ICS9LPRS528BKLF
ICS954309BKLFT	ICS9LPR802BKLF	ICS9LPRS471CKLF	ICS9LPRS528BKLF/W
ICS9LPR309AKLF	ICS9LPR802BKLFT	ICS9LPRS471CKLFT	ICS9LPRS528BKLFT
ICS9LPR309AKLFT	ICS9LPRS228CKLF	ICS9LPRS472BKLF	ICS9LPRS528CKLF
ICS9LPR309BKLF	ICS9LPRS228CKLF/W	ICS9LPRS472BKLFT	ICS9LPRS528CKLFT
ICS9LPR309BKLFT	ICS9LPRS228CKLFT	ICS9LPRS477AKLF	ICS9LRS3165AKLF
ICS9LPR311AKLF	ICS9LPRS319DKLF	ICS9LPRS477AKLFT	ICS9LRS3165AKLFT
ICS9LPR311AKLFT	ICS9LPRS319DKLFT	ICS9LPRS477BKLF	ICS9LRS3166AKLF
ICS9LPR311BKLF	ICS9LPRS319EKLF	ICS9LPRS477BKLFT	ICS9LRS3166AKLFT
ICS9LPR311BKLFT	ICS9LPRS319EKLFT	ICS9LPRS477CKLF	ICS9LVRS100AKLF
ICS9LPR321BKLF	ICS9LPRS355BKLF	ICS9LPRS477CKLFT	ICS9LVRS100AKLFT
ICS9LPR321BKLFT	ICS9LPRS355BKLFT	ICS9LPRS480AKLF	ICS9LVRS100BKLF
ICS9LPR323AKLF	ICS9LPRS355CKLF	ICS9LPRS480AKLFT	ICS9LVRS100BKLFT
ICS9LPR323AKLFT	ICS9LPRS355CKLFT	ICS9LPRS480BKLF	ICS9LVRS100CKLF
ICS9LPR515BKLF	ICS9LPRS357AKLF	ICS9LPRS480BKLFT	ICS9LVRS100CKLFT
ICS9LPR515BKLFT	ICS9LPRS357AKLFT	ICS9LPRS501PKLF	ICS9LVRS129AKLF
ICS9LPR515CKLF	ICS9LPRS365BKLF	ICS9LPRS501PKLFT	ICS9LVRS129AKLFT
ICS9LPR515CKLFT	ICS9LPRS365BKLFT	ICS9LPRS501SKLF	IDTCV169CNLG
ICS9LPR800BKLF	ICS9LPRS365CKLF	ICS9LPRS501SKLFT	IDTCV169CNLG8
ICS9LPR800BKLFT	ICS9LPRS365CKLFT	ICS9LPRS528AKLF	IDTCV179CNLG
ICS9LPR800CKLF	ICS9LPRS471AKLF	ICS9LPRS528AKLFT	IDTCV179CNLG8



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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT II - PCN # : A0808-02

Affected Part Number for VFQFP-N-72

Part Number	Part Number	Part Number	Part Number
ICS932S309CK	ICS9FG1903AKLFT	ICS9LPRS133AKLFT	ICS9LPRS474AKLFT
ICS932S309CKT	ICS9FG1903CKLF	ICS9LPRS133BKLF	ICS9LPRS474DKLF
ICS932S310AKLF	ICS9FG1903CKLFT	ICS9LPRS133BKLFT	ICS9LPRS474DKLFT
ICS932S310AKLFT	ICS9FG1903DKLF	ICS9LPRS138AKLF	ICS9LPRS476AKLF
ICS932S509BKLF	ICS9FG1903DKLFT	ICS9LPRS138AKLFT	ICS9LPRS476AKLFT
ICS932S509BKLFT	ICS9FG1904BK-1LF	ICS9LPRS138BKLF	ICS9LPRS476DKLF
ICS932S509CKLF	ICS9FG1904BK-1LFT	ICS9LPRS138BKLFT	ICS9LPRS476DKLFT
ICS932S509CKLFT	ICS9LPR325CKLF	ICS9LPRS139AKLF	ICS9LPRS476EKLF
ICS932S509DKLF	ICS9LPR325CKLFT	ICS9LPRS139AKLFT	ICS9LPRS476EKLFT
ICS932S509DKLFT	ICS9LPR332AKLF	ICS9LPRS325CKLF	ICS9LPRS476HKLF
ICS932S509EKLFT	ICS9LPR332AKLFT	ICS9LPRS325CKLFT	ICS9LPRS476HKLFT
ICS932S509EKLFT	ICS9LPR333AKLF	ICS9LPRS333AKLF	ICS9LPRS478AKLF
ICS932S890AKLF	ICS9LPR333AKLFT	ICS9LPRS333AKLFT	ICS9LPRS478AKLFT
ICS932S890AKLFT	ICS9LPR333BKLF	ICS9LPRS333CKLF	ICS9LPRS478CKLF
ICS932S890BKLF	ICS9LPR333BKLFT	ICS9LPRS333CKLFT	ICS9LPRS478CKLFT
ICS932S890BKLFT	ICS9LPR333CKLF	ICS9LPRS353ENG1KLF	ICS9LPRS488BKLF
ICS954305DKLF	ICS9LPR333CKLFT	ICS9LPRS353ENG1KLF	ICS9LPRS488BKLFT
ICS954305DKLFT	ICS9LPR333DKLF	ICS9LPRS387AKLF	ICS9LPRS488CKLF
ICS954305DKLFT-TRQ1	ICS9LPR333DKLFT	ICS9LPRS387AKLFT	ICS9LPRS488CKLFT
ICS954305EKLFT	ICS9LPR333EKLFT	ICS9LPRS387BKLF	ICS9LPRS910AKLF
ICS954305EKLFT	ICS9LPR333EKLFT	ICS9LPRS387BKLFT	ICS9LPRS910AKLFT
ICS9EX21801AKLF	ICS9LPR333HKLFT	ICS9LPRS390BKLF	ICS9LPRS910BKLF
ICS9EX21801AKLFT	ICS9LPR333HKLFT	ICS9LPRS390BKLFT	ICS9LPRS910BKLFT
ICS9FG1900AK-1LF	ICS9LPR335BKLF	ICS9LPRS390CKLF	ICS9LPRS910CKLF
ICS9FG1900AK-1LFT	ICS9LPR335BKLFT	ICS9LPRS390CKLFT	ICS9LPRS910CKLFT
ICS9FG1900BK-1LF	ICS9LPR335CKLF	ICS9LPRS392AKLF	ICS9LPRS911BKLF
ICS9FG1900BK-1LFT	ICS9LPR335CKLFT	ICS9LPRS392AKLFT	ICS9LPRS911BKLFT
ICS9FG1901CK	ICS9LPR336AKLF	ICS9LPRS395BKLF	ICS9LPRS914EKLFT
ICS9FG1901CKLFT	ICS9LPR336AKLFT	ICS9LPRS395BKLFT	ICS9LPRS914EKLFT
ICS9FG1901CKLFT	ICS9LPR350AKLF	ICS9LPRS395CKLF	ICS9LPRS915AKLF
ICS9FG1901CKT	ICS9LPR350AKLFT	ICS9LPRS395CKLFT	ICS9LPRS915AKLFT
ICS9FG1901EKLFT	ICS9LPR390AKLF	ICS9LPRS397AKLF	ICS9LPRS918BKLF
ICS9FG1901EKLFT	ICS9LPR390AKLFT	ICS9LPRS397AKLFT	ICS9LPRS918BKLFT
ICS9FG1901HKLFT	ICS9LPR390BKLF	ICS9LPRS397BKLF	ICS9LPRS918CKLF
ICS9FG1901HKLFT	ICS9LPR390BKLFT	ICS9LPRS397BKLFT	ICS9LPRS918CKLFT
ICS9FG1902AK	ICS9LPR390CKLF	ICS9LPRS397CKLF	ICS9LPRS918HKLFT
ICS9FG1902AKLFT	ICS9LPR390CKLFT	ICS9LPRS397CKLFT	ICS9LPRS918HKLFT
ICS9FG1902AKLFT	ICS9LPRS110AKLF	ICS9LPRS397DKLF	ICS9LPRS918JKLFT
ICS9FG1902AKT	ICS9LPRS110AKLFT	ICS9LPRS397DKLFT	ICS9LPRS918JKLFT
ICS9FG1903AK-1LF	ICS9LPRS113AKLF	ICS9LPRS397EKLFT	ICS9LPRS919BKLF
ICS9FG1903AK-1LFT	ICS9LPRS113AKLFT	ICS9LPRS397EKLFT	ICS9LPRS919BKLFT
ICS9FG1903AK-2LF	ICS9LPRS114BKLF	ICS9LPRS470BKLF	ICS9LPRS919CKLF
ICS9FG1903AK-2LFT	ICS9LPRS114BKLFT	ICS9LPRS470BKLFT	ICS9LPRS919CKLFT
ICS9FG1903AKLF	ICS9LPRS133AKLF	ICS9LPRS474AKLF	ICS9LPRS919HKLFT



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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT II - PCN # : A0808-02

Affected Part Number for VFQFP-N-72

Part Number	Part Number	Part Number	Part Number
ICS9LPRS919HKLFT	ICS9LPRS929AKLFT	ICSCLK503J45KLF-TRQ	IDTCV153NLG
ICS9LPRS919JKLF	ICS9LVRS128CKLF	ICSCLK503J45KLFT	IDTCV153NLG8
ICS9LPRS919JKLFT	ICS9LVRS128CKLFT	ICSCLK503J45KLFT-TRQ	IDTCV171NLG
ICS9LPRS928AKLF	ICS9LVRS130AKLF	ICSCLK503J45KLFT-TRQ	IDTCV171NLG8
ICS9LPRS928AKLFT	ICS9LVRS130AKLFT	IDTCV145NLG	
ICS9LPRS929AKLF	ICSCLK503J45KLF	IDTCV145NLG8	