

iC-LSB, iC-LSC oBGA LS2C

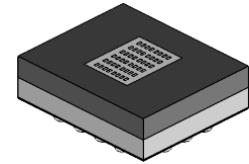
PHOTOSENSOR PACKAGE SPECIFICATION



Rev B1, Page 1/5

ORDERING INFORMATION

Type	Package	Options	Order Designation
iC-LSB	oBGA LS2C	glass lid	iC-LSB oBGA LS2C
iC-LSB	oBGA LS2C	reticle	iC-LSB oBGA LS2C-LSxR
iC-LSC	oBGA LS2C	glass lid	iC-LSC oBGA LS2C
iC-LSC	oBGA LS2C	reticle	iC-LSC oBGA LS2C-LSxR

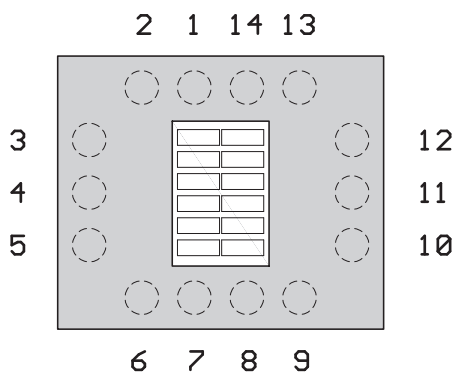


6.2 mm x 5.2 mm
RoHS compliant

PIN CONFIGURATION

PIN FUNCTIONS

(top view)



No.	Name	Function	iC-LSB	iC-LSC
1	VCC	+4...+5.5 V Supply Voltage	•	•
2	A1	Highside Current Source Output	•	•
3	B1	Highside Current Source Output	•	•
4	C1	Highside Current Source Output	•	•
5	D1	Highside Current Source Output	•	•
6	E1	Highside Current Source Output	n/c	•
7	F1	Highside Current Source Output	n/c	•
8	F2	Highside Current Source Output	n/c	•
9	E2	Highside Current Source Output	n/c	•
10	D2	Highside Current Source Output	•	•
11	C2	Highside Current Source Output	•	•
12	B2	Highside Current Source Output	•	•
13	A2	Highside Current Source Output	•	•
14	GND	Ground	•	•

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.				Unit
					Min.	Typ.	Max.	
TG1	Ta	Operating Ambient Temperature Range (extended temperature range on request)			-20		90	°C
TG2	Ts	Storage Temperature Range			-30		110	°C
TG3	Tpk	Reflow Soldering Peak Temperature	tpk < 20 s, convection reflow tpk < 20 s, vapour phase TOL (time on label) 8 h; please refer to customer information file No. 7 for details				245 230	°C °C

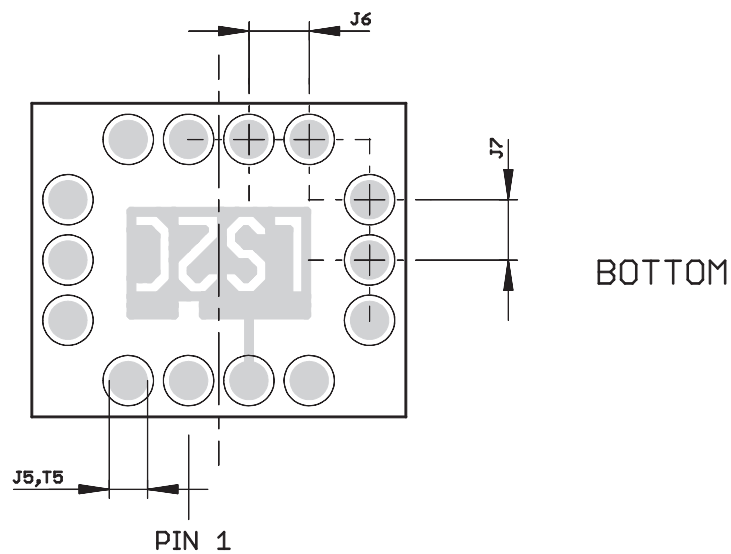
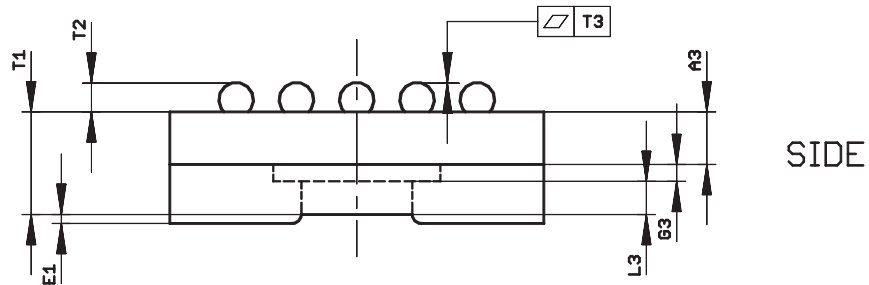
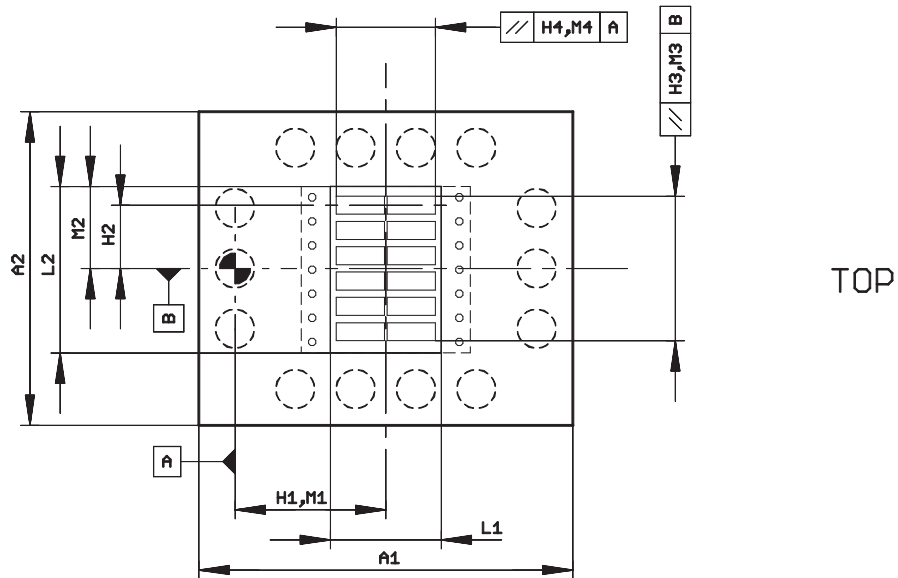
iC-LSB, iC-LSC oBGA LS2C

PHOTOSENSOR PACKAGE SPECIFICATION



Rev B1, Page 2/5

PHYSICAL DIMENSIONS



DRC_LS2C_PACK_1

iC-LSB, iC-LSC oBGA LS2C

PHOTOSENSOR PACKAGE SPECIFICATION



Rev B1, Page 3/5

DIMENSION TABLE

Item	Parameter	Comments					Unit
			Min.	Typ.	Max.	Tolerance	
	Substrate						
A1	Outline X			6.2		±0.1	mm
A2	Outline Y			5.2		±0.1	mm
A3	Substrate Thickness	bottom package to bottom die		0.87			mm
	Chip Placement						
G3	Chip Thickness			0.30			mm
H1	Sensor Array Position vs. Bottom Metal X	center of array		2.5		±0.15	mm
H2	Sensor Array Position vs. Bottom Metal Y	center of outermost trace		1.05		±0.15	mm
H3 H4	Parallelism Sensor Array vs. Bottom Metal				0.1		mm
	Bottom Metal Pattern						
J5	Lead Diameter			0.635		±0.03	mm
J6	Lead Pitch X (or Lead-Lead Distance X)			1.0			mm
J7	Lead Pitch Y (or Lead-Lead Distance Y)			1.0			mm
	Glass/Reticle Cover						
L1	Glass/Reticle Size X			1.84			mm
L2	Glass/Reticle Size Y	iC-LSB iC-LSC		1.84 2.64			mm mm
L3	Glass/Reticle Thickness	glass reticle		0.40 0.50			mm mm
M1	Glass/Reticle Position vs. Bottom Metal X			2.5			mm
M2	Glass/Reticle Position vs. Bottom Metal Y			1.36			mm
M3 M4	Parallelism Reticle-Pattern vs. Bottom Metal				0.15		mm
	Encapsulation						
E1	Coating Excess	surface glass to surface coating			0.05		mm
	Thickness Specifications						
T1	Overall Thickness	bottom substrate to top of glass (nominal glass cover thickness of 0.50 mm)	1.50		1.85		mm
T2	Solder Ball Height	drawing not to scale	0.36		0.5		mm
T3	Solder Ball Coplanarity					±0.05	mm
T5	Solder Ball Diameter			0.635			mm

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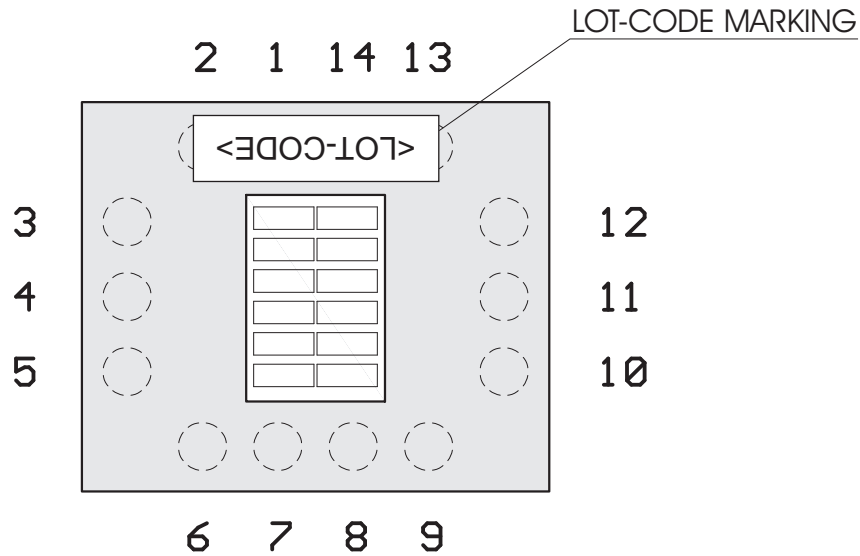
PHOTOSENSOR PACKAGE SPECIFICATION



Rev B1, Page 4/5

LOT-CODE MARKING (Position / Orientation)

Position and Orientation of Lot-Code Marking indicate Orientation of Device.



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PHOTOSENSOR PACKAGE SPECIFICATION



Rev B1, Page 5/5

REVISION HISTORY

Rev	Notes	Pages affected
A1	Initial version	
A2	Physical Dimensions/Dimension Table: Items H3, H4, M3, M4 changed from Symmetry to Parallelism; General Handling Instructions: RH updated from 20% to 10%; Revision of Absolute Maximum Ratings (TG3) Reflow Soldering; Disclaimer updated; Physical Dimensions/Dimension Table: item E1 added; Dimension Table: Items A3, G3, L3, T1 changed	all
A3	Section Lot-Code Marking added, Disclaimer updated	4, 5
A4	Correction of dimension L2	3
B1	Absolute Maximum Ratings: TG3: Conditions: convection reflow changed from 260°C to 245°C; Dimension L3: Glass Thickness 0.40mm, Reticle Thickness 0.50mm; disclaimer updated; iC-LSA no longer available	1, 3, 4

GENERAL HANDLING INSTRUCTIONS

After opening the dry pack, devices must be mounted within 8 hours (in factory conditions of maximum 30°C / 60% RH) or must be stored at <10% RH. Devices require baking before mounting if the Humidity Indicator Card shows >10% when read at 23°C ±5°C or if the conditions mentioned above are not met. Devices may be baked for 72 hours at 100°C using high-temperature device containers (trays).

Samples

Samples may not be subject for dry pack delivery, and, in that case, are not intended for reflow soldering.

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