

iC-OF oBGA OF4C

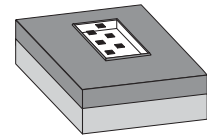
PACKAGE SPECIFICATION



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ORDERING INFORMATION

Type	Package	Options	Order Designation
iC-OF	optoBGA™ OF4C	none	iC-OF oBGA OF4C
		leaded balls	iC-OF oBGA OF4C-1
	optoBGA™ OF4C	built-in reticle	iC-OF oBGA OF4C-OF2RY

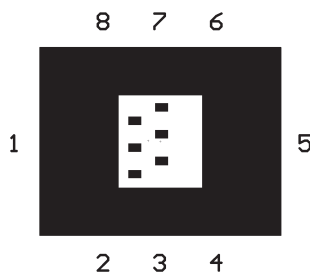


5.4 mm x 4.2 mm
RoHS compliant

PIN CONFIGURATION

PIN FUNCTIONS

(top view)



No.	Name	Function
1	NI0	Analog Current Output, Track 0
2	NI1	Analog Current Output, Track 1
3	NI2	Analog Current Output, Track 2
4	GND	Ground
5	S2	Push-Pull Output, Track 2
6	S1	Push-Pull Output, Track 1
7	S0	Push-Pull Output, Track 0
8	VCC	+5V Supply Voltage

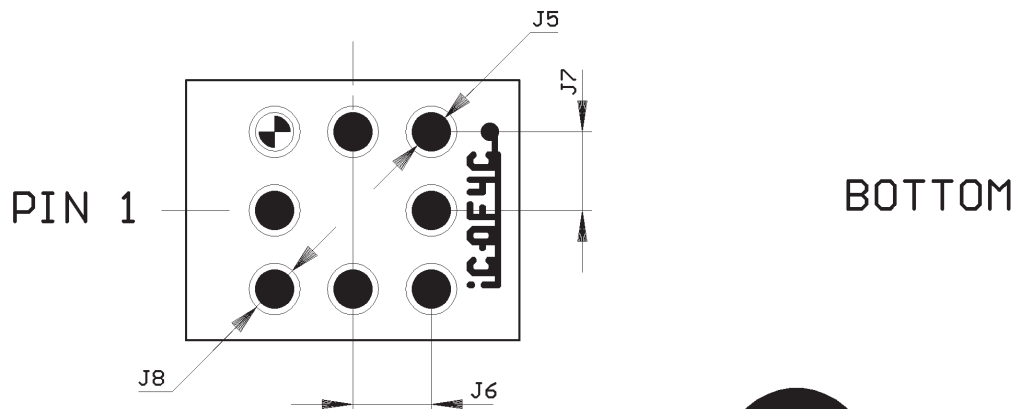
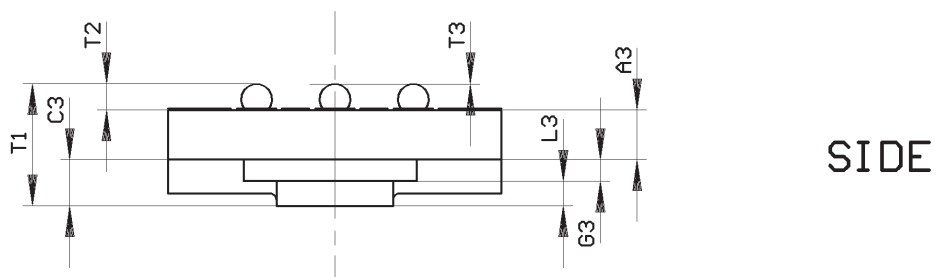
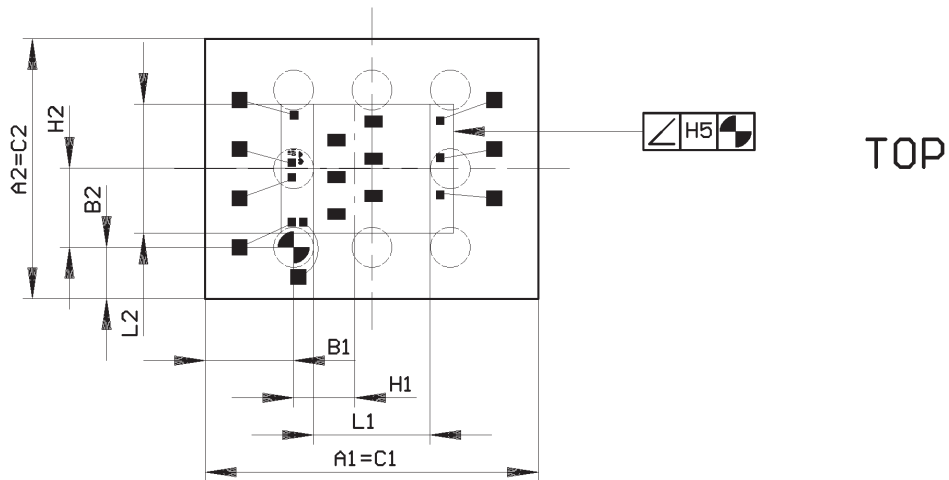
ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Parameter	Conditions	Fig.				Unit
					Min.	Typ.	Max.	
TG1	Ta	Operating Ambient Temperature Range (extended temperature range on request)	package oBGA OF4C package oBGA OF4C-1		-20 -30		90 90	°C °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

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PHYSICAL DIMENSIONS



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DIMENSION TABLE

Item	Parameter	Conditions					Unit
			Min.	Typ.	Max.	Tolerance	
	Substrate						
A1	Outline X			5.4		±0.1	mm
A2	Outline Y			4.2		±0.1	mm
A3	Substrate Thickness	bottom package to bottom die		1.05			mm
	Reference						
B1	Outline vs. Reference X			1.43		±0.1	mm
B2	Outline vs. Reference Y			0.83		±0.1	mm
	Frame Size and Shape (or Encapsulation)						
C1	Frame Outline X	equivalent to A1					
C2	Frame Outline Y	equivalent to A2					
C3	Frame Thickness				0.925		mm
	Chip Placement						
G3	Chip Thickness			0.3		±0.025	mm
H1	Chip Position vs. Reference X	center of sensors		0.996		±0.195	mm
H2	Chip Position vs. Reference Y	center of sensors		1.283		±0.195	mm
H5	Chip Tilt Angle vs. Paddle					±1.6	DEG
	Bottom Metal Pattern						
J5	Lead Size			0.635		±0.03	mm
J6	Lead Pitch X (or Lead-Lead Distance X)			1.27		±0.03	mm
J7	Lead Pitch Y (or Lead-Lead Distance Y)			1.27		±0.03	mm
J8	Solder Stop Off			0.835		±0.1	mm
	Encapsulant (Glass Cover)						
L1	Glass Size X			1.888			mm
L2	Glass Size Y			2.0			mm
L3	Glass Thickness			0.4			mm
M1	Glass Position vs. Chip X	glass, no pattern reticle				±0.1 ±0.025	mm mm
M2	Glass Position vs. Chip Y	glass, no pattern reticle				±0.1 ±0.025	mm mm
	Thickness Specifications						
T1	Overall Thickness	bottom substrate to top of glass (nominal glass cover thickness of 0.4 mm)	1.77		2.43		mm
T2	Solder Ball Height		0.36		0.5		mm
T3	Solder Ball Coplanarity					±0.05	mm

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REVISION HISTORY

Rev	Notes	Pages affected
A2	Revised drawing and dimension tolerances	2, 3
A3	Lead temperature revised	1
B1	Complete revision Particularly with regard to Absolute Maximum Ratings (TG3) for reflow soldering, leaded package version OF4C-1, and disclaimer.	all
C1	Absolute Maximum Ratings: TG3: Conditions: convection reflow changed from 260°C to 245°C; changes to Dimension Table (A3, L1...L3, T1); disclaimer updated	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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