

10 Leads - QFN Dual 3x3
Package Material Declaration



Date	04-Jan-19	Product name	Integrated Circuit
Package Code	LW	RoHS Compliant	Y
Package Name	Micro Leadframe Package Double	Halogen Free	Y
Product Total Mass (g)	0.02446	Plating	Pure Matte Sn

Product Number	MLX90412
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Material Declaration

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	High Copper Alloy C194	0.01043	Copper (Cu)	7440-50-8	97.5	0.01017	415750
			Iron (Fe)	7439-89-6	2.35	0.00025	10021
			Zinc (Zn)	7440-66-6	0.03	0.000003	128
			Phosphor (P)	7723-14-0	0.12	0.000013	512
Plating	Silver	0.00011	Silver (Ag)	7440-22-4	100	0.00011	4497
Die	Silicon	0.00038	Silicon (Si)	7440-21-3	99.99	0.00038	15534
			Others	-	0.01	0.00000004	2
Die attach material	Conductive epoxy QM1519	0.00003	Silver (max 100%)	7440-22-4	85	0.00003	1043
			Acrylates (max 5%)	none	5	0.000002	61
			Proprietary Bismaleimide (max	none	5	0.000002	61
			Additive (max5%)	none	5	0.000002	61
Wire	Palladium coated Copper	0.0001	Copper (Cu)	7440-50-8	97.68	0.00010	3993
			Palladium (Pd)	7440-05-3	2.3	0.000002	94
			Others	-	0.02	0.00000002	1
Lead Finish	Tin	0.00012	Tin (Sn)	7440-31-5	99.99	0.00012	4905
			others	-	0.01	0.00000001	0.5
Encapsulation	Epoxy Resin EMEG770HCD	0.01329	Silica fused (85~95%)	60676-86-0	93.7	0.01245	509106
			Epoxy Resin (1~5%)	Proprietary	3	0.00040	16300
			Phenol Resin (1~5%)	Proprietary	3	0.00040	16300
			Carbon black (0.1~0.5%)	1333-86-4	0.3	0.00004	1630

Total package weight (g) 0.02446

Comments

- Composition derived from MSDS and material CoC from vendors
- Component weight based on assembly of generic parts
- Reliability qualification reports are available upon request through the appropriate sales or marketing contact
- Third party testing for RoHS substances are available upon request to environment@melexis.com

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