

**28 Leads - QFN Quad 5x5
Package Material Declaration**



Date	03-Jan-19	Product name	Integrated Circuit
Package Code	LQ	RoHS Compliant	Y
Package Name	Micro Leadframe Package Quad	Halogen Free	Y
Product Total Mass (g)	0.07441	Plating	Ni/Pd/Au

Product Number	MLX80105
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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	0.03875	Copper (Cu)	7440-50-8	97.50	0.03778	507785
			Iron (Fe)	7439-89-6	2.35	0.00091	12239
			Zinc (Zn)	7440-66-6	0.12	0.00005	625
			Phosphorus (P)	7723-14-0	0.03	0.00001	156
Frame plating	Ni/Au	0.00464	Nickel (Ni)	7440-02-0	95.84	0.00445	59805
			Gold (Au)	7440-57-5	4.16	0.00019	2596
Die	Silicon	0.00470	Silicon (Si)	7440-21-3	99.99	0.00470	63201
			others	-	0.01	0.0000005	6
Die attach materials	AMK-06	0.00104	Proprietary Acrylates	Proprietary	13	0.00014	1822
			Silver (Ag)	7440-22-4	80	0.00083	11214
			Proprietary Bismaleimide	Proprietary	3	0.00003	421
			Methacrylate Ester	Unknown	3	0.00003	421
Wire	Palladium doped Gold	0.00078	Gold (Au)	7440-57-5	99	0.00077	10312
			Palladium (Pd)	7440-05-3	1	0.000008	104
External Plating	Ni/Pd/Au	0.00019	Nickel (Ni)	7440-02-0	97.38	0.00019	2500
			Palladium (Pd)	7440-05-3	2.09	0.000004	54
			Gold (Au)	7440-57-5	0.52	0.000001	13
Encapsulation	CEL 9220HF13A	0.02430	Biphenyl Resin	Proprietary	11	0.00267	35925
			SiO2 Filler	60676-86-0	89	0.02163	290662

Total package weight (g) 0.07441

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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