

6 Leads - UTQFN
Package Material Declaration



Date	12-Feb-18	Product name	Integrated Circuit
Package Code	LD	RoHS Compliant	Y
Package Name	Ultra Thin Leadframe Package Double	Halogen Free	Y
Product Total Mass (g)	0.00377	Plating	NiPdAu

Product Number	US168
-----------------------	-------

Material Declaration

Part Name	Material Name	Component Weight (g)	Material Component (Element)	CAS #	Element ratio (%)	Material Weight (g)	Ratio total Wt (ppm)
Leadframe	NiPdAu pre-plated Copper Alloy C7025	0.00165	Cu (remaining)	7440-50-8	94.65	0.00156	414328
			Si (0.25~1.2%)	7440-21-3	0.52	0.00001	2276
			Ni (2.2~4.2%)	7440-02-0	3.43	0.00006	15015
			Mg (0.05~0.3%)	7439-95-4	0.13	0.000002	569
			Ni plating (0.8~1.5%)	7440-02-0	1.15	0.00002	5034
			Pd (0.05~0.15%)	7440-05-3	0.1	0.000002	438
			Au (0.01~0.02%)	7440-57-5	0.02	0.0000003	88
Die	Silicon IC	0.00025	Silicon (Si)	7440-21-3	99.99	0.00024	64942
			others	-	0.01	0.00000002	6
Die attach material	Conductive epoxy QMIS19	0.00010	Silver (max 100%)	7440-22-4	85	0.00009	23053
			Acrylates (max 5%)	none	5	0.00001	1356
			Proprietary Bismaleimide (max	none	5	0.00001	1356
			Additive (max5%)	none	5	0.00001	1356
Wire	Gold	0.00002	Gold (Au)	7440-57-5	99.99	0.00002	5301
			others	-	0.01	0.000000002	1
Encapsulation	Epoxy Resin EMEG770HCD	0.00175	Silica fused (85~95%)	60676-86-0	93.7	0.00164	435594
			Epoxy Resin (1~5%)	Proprietary	3	0.00005	13946
			Phenol Resin (1~5%)	Proprietary	3	0.00005	13946
			Carbon black (0.1~0.5%)	1333-86-4	0.3	0.00001	1395

Total package weight (g) 0.00377

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

Disclaimer

"MELEXIS has taken every effort to ensure that the information provided in this document is correct, accurate and up-to-date.

MELEXIS, however, shall not be held liable for any improper or incorrect use of the information described and/or contained herein and assumes no responsibility whatsoever for recipient's or a third party's use of this information. In no event MELEXIS shall be held liable for any direct, indirect, incidental, special, exemplary, or consequential damages (including, but not limited to: procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, tort (including negligence or otherwise), or any other theory arising in any way out of the use of this system, even if advised of the possibility of such damage.

This disclaimer of liability applies to any damages or injury, whether based on alleged breach of contract, tortious behavior, negligence or any other cause of action".

The content of this document is CONFIDENTIAL & PROPRIETARY. ALL Rights Reserved.