

# Material Declaration Form

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ams AG  
Tobelbader Strasse 30  
A-8141 Premstaetten, Austria  
Tel +43 (0) 3136 500-0



Ordering Code	Package Family	Assembly Material Number	Lead Count	Weight (mg)	Manufacturing Country	Halogen Free	EU RoHS	China RoHS	Release Status	Version
AS1111B-BWLT	WLCSP	193270006	6	1.33	Philippines	YES	YES	YES	PROTOS	1

Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
IC	0.87	Si	Silicon	100.00	7440-21-3	0.87213	65.36579	653658
<b>Subtotal:</b>				<b>100.00</b>		<b>0.87213</b>	<b>65.36579</b>	<b>653658</b>
PBO 1	0.01	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.00351	0.26307	2631
			Polyamide	50.00	63428-83-1	0.00351	0.26307	2631
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00702</b>	<b>0.52615</b>	<b>5261</b>
PBO 2	0.01	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.00286	0.21436	2144
			Polyamide	50.00	63428-83-1	0.00286	0.21436	2144
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00572</b>	<b>0.42871</b>	<b>4287</b>
UBM Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00003	0.00225	22
		W	Tungsten	90.00	7440-33-7	0.00027	0.02024	202
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00030</b>	<b>0.02248</b>	<b>225</b>
UBM Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00046	0.03448	345
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00046</b>	<b>0.03448</b>	<b>345</b>
UBM Cu	0.02	Cu	Copper	100.00	7440-50-8	0.02083	1.56120	15612
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02083</b>	<b>1.56120</b>	<b>15612</b>
RDL Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00008	0.00577	58
		W	Tungsten	90.00	7440-33-7	0.00069	0.05194	519
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00077</b>	<b>0.05771</b>	<b>577</b>
RDL Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00118	0.08844	884
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00118</b>	<b>0.08844</b>	<b>884</b>

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Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
RDL Cu	0.02	Cu	Copper	100.00	7440-50-8	0.02366	1.77331	17733
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02366</b>	<b>1.77331</b>	<b>17733</b>
Solder Balls	0.37	Ag	Silver	4.00	7440-22-4	0.01464	1.09726	10973
		Cu	Copper	0.50	7440-50-8	0.00183	0.13716	1372
		Sn	Tin	95.50	7440-31-5	0.34953	26.19713	261971
<b>Subtotal:</b>				<b>100.00</b>		<b>0.36600</b>	<b>27.43155</b>	<b>274316</b>
Laminate	0.04	SiO2	Silica	20.00	7631-86-9	0.00723	0.54204	5420
			Carbon Black	0.30	1333-86-4	0.00011	0.00813	81
			Phenol/ formaldehyde/ epichloronhydrin copolymer	5.70	9003-36-5	0.00206	0.15448	1545
			Polyethylene terephthalate	74.00	25038-59-9	0.02676	2.00553	20055
<b>Subtotal:</b>				<b>100.00</b>		<b>0.03616</b>	<b>2.71018</b>	<b>27102</b>
<b>Total:</b>	<b>1.33</b>					<b>1.33</b>	<b>100.00000</b>	<b>1000000</b>

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