

# 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
AS3701A-BWLM-50	WLCSP	193720031	17	5.12	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	3.7	Si	Silicon	100.00	7440-21-3	3.69684	72.21646	722165
<b>Subtotal:</b>				<b>100.00</b>		<b>3.69684</b>	<b>72.21646</b>	<b>722165</b>
PBO 1	0.03	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.01548	0.30230	3023
			Polyamide	50.00	63428-83-1	0.01548	0.30230	3023
<b>Subtotal:</b>				<b>100.00</b>		<b>0.03095</b>	<b>0.60460</b>	<b>6046</b>
PBO 2	0.03	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.01372	0.26802	2680
			Polyamide	50.00	63428-83-1	0.01372	0.26802	2680
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02744</b>	<b>0.53603</b>	<b>5360</b>
UBM Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00009	0.00168	17
		W	Tungsten	90.00	7440-33-7	0.00077	0.01512	151
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00086</b>	<b>0.01680</b>	<b>168</b>
UBM Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00131	0.02559	256
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00131</b>	<b>0.02559</b>	<b>256</b>
UBM Cu	0.06	Cu	Copper	100.00	7440-50-8	0.05902	1.15293	11529
<b>Subtotal:</b>				<b>100.00</b>		<b>0.05902</b>	<b>1.15293</b>	<b>11529</b>
RDL Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00034	0.00658	66
		W	Tungsten	90.00	7440-33-7	0.00303	0.05925	592
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00337</b>	<b>0.06583</b>	<b>658</b>
RDL Seed Layer Cu	0.01	Cu	Copper	100.00	7440-50-8	0.00519	0.10138	1014
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00519</b>	<b>0.10138</b>	<b>1014</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	0.1	Cu	Copper	100.00	7440-50-8	0.10383	2.02828	20283
<b>Subtotal:</b>				<b>100.00</b>		<b>0.10383</b>	<b>2.02828</b>	<b>20283</b>
Solder Balls	1.04	Ag	Silver	4.00	7440-22-4	0.04148	0.81030	8103
		Cu	Copper	0.50	7440-50-8	0.00519	0.10129	1013
		Sn	Tin	95.50	7440-31-5	0.99034	19.34603	193460
<b>Subtotal:</b>				<b>100.00</b>		<b>1.03701</b>	<b>20.25762</b>	<b>202576</b>
Laminate	0.15	SiO2	Silica	20.00	7631-86-9	0.03066	0.59889	5989
			Carbon Black	0.30	1333-86-4	0.00046	0.00898	90
			Phenol/ formaldehyde/ epichloronhydrin copolymer	5.70	9003-36-5	0.00874	0.17068	1707
			Polyethylene terephthalate	74.00	25038-59-9	0.11343	2.21590	22159
<b>Subtotal:</b>				<b>100.00</b>		<b>0.15329</b>	<b>2.99447</b>	<b>29945</b>
<b>Total:</b>	<b>5.12</b>					<b>5.12</b>	<b>100.00000</b>	<b>1000000</b>

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