

# 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
AS5510-DWLT	WLCSP	184550022	6	1.81	Philippines	YES	YES	YES	FULL	1

Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
IC	1.34	Si	Silicon	100.00	7440-21-3	1.33663	73.73062	737306
<b>Subtotal:</b>				<b>100.00</b>		<b>1.33663</b>	<b>73.73062</b>	<b>737306</b>
PBO 1	0.01	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.00528	0.29098	2910
			Polyamide	50.00	63428-83-1	0.00528	0.29098	2910
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01055</b>	<b>0.58195</b>	<b>5820</b>
PBO 2	0.01	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.00456	0.25173	2517
			Polyamide	50.00	63428-83-1	0.00456	0.25173	2517
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00913</b>	<b>0.50346</b>	<b>5035</b>
UBM Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00003	0.00165	17
		W	Tungsten	90.00	7440-33-7	0.00027	0.01489	149
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00030</b>	<b>0.01655</b>	<b>165</b>
UBM Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00046	0.02554	255
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00046</b>	<b>0.02554</b>	<b>255</b>
UBM Cu	0.02	Cu	Copper	100.00	7440-50-8	0.02083	1.14901	11490
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02083</b>	<b>1.14901</b>	<b>11490</b>
RDL Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00004	0.00224	22
		W	Tungsten	90.00	7440-33-7	0.00037	0.02016	202
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00041</b>	<b>0.02240</b>	<b>224</b>
RDL Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00063	0.03448	345
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00063</b>	<b>0.03448</b>	<b>345</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	0.01	Cu	Copper	100.00	7440-50-8	0.01250	0.68963	6896
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01250</b>	<b>0.68963</b>	<b>6896</b>
Solder Balls	0.37	Ag	Silver	4.00	7440-22-4	0.01464	0.80756	8076
		Cu	Copper	0.50	7440-50-8	0.00183	0.10095	1009
		Sn	Tin	95.50	7440-31-5	0.34953	19.28058	192806
<b>Subtotal:</b>				<b>100.00</b>		<b>0.36600</b>	<b>20.18909</b>	<b>201891</b>
Laminate	0.06	SiO2	Silica	20.00	7631-86-9	0.01108	0.61145	6115
			Carbon Black	0.30	1333-86-4	0.00017	0.00917	92
			Phenol/ formaldehyde/ epichloronhydrin copolymer	5.70	9003-36-5	0.00316	0.17426	1743
			Polyethylene terephthalate	74.00	25038-59-9	0.04101	2.26238	22624
<b>Subtotal:</b>				<b>100.00</b>		<b>0.05542</b>	<b>3.05727</b>	<b>30573</b>
<b>Total:</b>	<b>1.81</b>					<b>1.81</b>	<b>100.00000</b>	<b>1000000</b>

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