

# Product Document

# 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
AS3715-BWLT-24	WLCSP	192370060	81	15.07	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	12.16	Si	Silicon	100.00	7440-21-3	12.15520	80.66463	806646
<b>Subtotal:</b>				<b>100.00</b>		<b>12.15520</b>	<b>80.66463</b>	<b>806646</b>
PBO 1	0.1	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.05186	0.34412	3441
			Polyamide	50.00	63428-83-1	0.05186	0.34412	3441
<b>Subtotal:</b>				<b>100.00</b>		<b>0.10371</b>	<b>0.68824</b>	<b>6882</b>
PBO 2	0.09	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.04459	0.29591	2959
			Polyamide	50.00	63428-83-1	0.04459	0.29591	2959
<b>Subtotal:</b>				<b>100.00</b>		<b>0.08918</b>	<b>0.59182</b>	<b>5918</b>
UBM Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00041	0.00272	27
		W	Tungsten	90.00	7440-33-7	0.00369	0.02449	245
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00410</b>	<b>0.02721</b>	<b>272</b>
UBM Seed Layer Cu	0.01	Cu	Copper	100.00	7440-50-8	0.00636	0.04221	422
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00636</b>	<b>0.04221</b>	<b>422</b>
UBM Cu	0.29	Cu	Copper	100.00	7440-50-8	0.28601	1.89803	18980
<b>Subtotal:</b>				<b>100.00</b>		<b>0.28601</b>	<b>1.89803</b>	<b>18980</b>
RDL Seed Layer TiW	0.01	Ti	Titanium	10.00	7440-32-6	0.00118	0.00785	79
		W	Tungsten	90.00	7440-33-7	0.01065	0.07066	707
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01183</b>	<b>0.07851</b>	<b>785</b>
RDL Seed Layer Cu	0.02	Cu	Copper	100.00	7440-50-8	0.01826	0.12118	1212
<b>Subtotal:</b>				<b>100.00</b>		<b>0.01826</b>	<b>0.12118</b>	<b>1212</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	0.37	Cu	Copper	100.00	7440-50-8	0.36513	2.42308	24231
<b>Subtotal:</b>				<b>100.00</b>		<b>0.36513</b>	<b>2.42308</b>	<b>24231</b>
Solder Balls	1.53	Ag	Silver	4.00	7440-22-4	0.06100	0.40481	4048
		Cu	Copper	0.50	7440-50-8	0.00763	0.05060	506
		Sn	Tin	95.50	7440-31-5	1.45638	9.66489	96649
<b>Subtotal:</b>				<b>100.00</b>		<b>1.52501</b>	<b>10.12031</b>	<b>101203</b>
Laminate	0.5	SiO2	Silica	20.00	7631-86-9	0.10080	0.66896	6690
			Carbon Black	0.30	1333-86-4	0.00151	0.01003	100
			Phenol/ formaldehyde/ epichloronhydrin copolymer	5.70	9003-36-5	0.02873	0.19065	1907
			Polyethylene terephthalate	74.00	25038-59-9	0.37297	2.47514	24751
<b>Subtotal:</b>				<b>100.00</b>		<b>0.50402</b>	<b>3.34479</b>	<b>33448</b>
<b>Total:</b>	<b>15.07</b>					<b>15.07</b>	<b>100.00000</b>	<b>1000000</b>

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