

# Material Declaration Form

Page 1

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
AS3701B-BWLT-06	WLCSP	193720056	20	5.32	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	69.45514	694551
<b>Subtotal:</b>				<b>100.00</b>		<b>3.69684</b>	<b>69.45514</b>	<b>694551</b>
PBO 1	0.03	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.01548	0.29083	2908
			Polyamide	50.00	63428-83-1	0.01548	0.29083	2908
<b>Subtotal:</b>				<b>100.00</b>		<b>0.03096</b>	<b>0.58167</b>	<b>5817</b>
PBO 2	0.03	BLO (1-10)	Gamma Butyrolactone	50.00	96-48-0	0.01364	0.25617	2562
			Polyamide	50.00	63428-83-1	0.01364	0.25617	2562
<b>Subtotal:</b>				<b>100.00</b>		<b>0.02727</b>	<b>0.51234</b>	<b>5123</b>
UBM Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00010	0.00192	19
		W	Tungsten	90.00	7440-33-7	0.00092	0.01725	172
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00102</b>	<b>0.01916</b>	<b>192</b>
UBM Seed Layer Cu	0	Cu	Copper	100.00	7440-50-8	0.00157	0.02950	295
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00157</b>	<b>0.02950</b>	<b>295</b>
UBM Cu	0.07	Cu	Copper	100.00	7440-50-8	0.07062	1.32679	13268
<b>Subtotal:</b>				<b>100.00</b>		<b>0.07062</b>	<b>1.32679</b>	<b>13268</b>
RDL Seed Layer TiW	0	Ti	Titanium	10.00	7440-32-6	0.00036	0.00680	68
		W	Tungsten	90.00	7440-33-7	0.00326	0.06121	612
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00362</b>	<b>0.06801</b>	<b>680</b>
RDL Seed Layer Cu	0.01	Cu	Copper	100.00	7440-50-8	0.00559	0.10502	1050
<b>Subtotal:</b>				<b>100.00</b>		<b>0.00559</b>	<b>0.10502</b>	<b>1050</b>

The information provided in this statement represents ams AG knowledge and belief as of the date that it is provided. ams AG bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy and shall have no liability for the consequences of use of such information. ams AG has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. ams AG and its suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

# Material Declaration Form

Page 2

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



Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
RDL Cu	0.11	Cu	Copper	100.00	7440-50-8	0.11185	2.10140	21014
<b>Subtotal:</b>				<b>100.00</b>		<b>0.11185</b>	<b>2.10140</b>	<b>21014</b>
Solder Balls	1.22	Ag	Silver	4.00	7440-22-4	0.04880	0.91684	9168
		Cu	Copper	0.50	7440-50-8	0.00610	0.11460	1146
		Sn	Tin	95.50	7440-31-5	1.16510	21.88955	218896
<b>Subtotal:</b>				<b>100.00</b>		<b>1.22000</b>	<b>22.92100</b>	<b>229210</b>
Laminate	0.15	SiO2	Silica	20.00	7631-86-9	0.03066	0.57599	5760
			Carbon Black	0.30	1333-86-4	0.00046	0.00864	86
			Phenol/ formaldehyde/ epichloronhydrin copolymer	5.70	9003-36-5	0.00874	0.16416	1642
			Polyethylene terephthalate	74.00	25038-59-9	0.11343	2.13118	21312
<b>Subtotal:</b>				<b>100.00</b>		<b>0.15329</b>	<b>2.87997</b>	<b>28800</b>
<b>Total:</b>	<b>5.32</b>					<b>5.32</b>	<b>100.00000</b>	<b>1000000</b>

The information provided in this statement represents ams AG knowledge and belief as of the date that it is provided. ams AG bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy and shall have no liability for the consequences of use of such information. ams AG has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. ams AG and its suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.