

# 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
AS5171B-HSIT	SIP	501220047	3	414.4	Taiwan	YES	YES	YES	FULL	2

  

Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
Leadframe	151.73	Ag	Silver	0.01	7440-22-4	0.01517	0.00366	37
		Cu	Copper	99.92	7440-50-8	151.61061	36.58557	365856
		Zr	Zirconium	0.07	7440-67-7	0.10621	0.02563	256
		<b>Subtotal:</b>		<b>100.00</b>		<b>151.73200</b>	<b>36.61486</b>	<b>366149</b>
Adhesive	0.6	Ag	Silver	77.00	7440-22-4	0.46046	0.11111	1111
		BLO (1-10)	Gamma Butyrolactone	1.00	96-48-0	0.00598	0.00144	14
			Epoxy Resin	22.00	25928-94-3	0.13156	0.03175	317
		<b>Subtotal:</b>		<b>100.00</b>		<b>0.59800</b>	<b>0.14431</b>	<b>1443</b>
IC	5.93	Si	Silicon	95.00	7440-21-3	5.63065	1.35875	13587
			Polyimide	5.00	58698-66-1	0.29635	0.07151	715
		<b>Subtotal:</b>		<b>100.00</b>		<b>5.92700</b>	<b>1.43026</b>	<b>14303</b>
Wire	0.17	Au	Gold	99.00	7440-57-5	0.16731	0.04037	404
		Pd	Palladium	1.00	7440-05-3	0.00169	0.00041	4
		<b>Subtotal:</b>		<b>100.00</b>		<b>0.16900</b>	<b>0.04078</b>	<b>408</b>
Moldcompound	240.68		Carbon Black	0.30	1333-86-4	0.72205	0.17424	1742
			Epoxy Resin	9.00	25928-94-3	21.66156	5.22721	52272
			Phenol Resin	5.70	28064-14-4	13.71899	3.31057	33106
			Silica (Amorphous) A	78.00	60676-86-0	187.73352	45.30249	453025
			Silica (Amorphous) B	7.00	7631-86-9	16.84788	4.06561	40656
		<b>Subtotal:</b>		<b>100.00</b>		<b>240.68400</b>	<b>58.08012</b>	<b>580801</b>

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Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
Plating	3.86	Sn	Tin	100.00	7440-31-5	3.86200	0.93195	9319
<b>Subtotal:</b>				<b>100.00</b>		<b>3.86200</b>	<b>0.93195</b>	<b>9319</b>
Solder Paste	0.13	Sb	Antimony	5.00	7440-36-0	0.00640	0.00154	15
		Sn	Tin	95.00	7440-31-5	0.12160	0.02934	293
<b>Subtotal:</b>				<b>100.00</b>		<b>0.12800</b>	<b>0.03089</b>	<b>309</b>
SIP Capacitor C1	4.47	Cu	Copper	15.60	7440-50-8	0.69654	0.16808	1681
		Ni	Nickel	4.30	7440-02-0	0.19200	0.04633	463
		O7Tb4-2	Tetraterbium heptaoxide	2.40	12037-01-3	0.10716	0.02586	259
		Sn	Tin	1.30	7440-31-5	0.05805	0.01401	140
			Barium Titanate	71.50	12047-27-7	3.19248	0.77038	7704
			Ytterby Oxide	3.40	1314-37-0	0.15181	0.03663	366
			Yttrium Oxide	1.50	1314-36-9	0.06698	0.01616	162
<b>Subtotal:</b>				<b>100.00</b>		<b>4.46500</b>	<b>1.07746</b>	<b>10775</b>
SIP Capacitor C2	5.44	Cu	Copper	15.60	7440-50-8	0.84786	0.20460	2046
		Ni	Nickel	4.30	7440-02-0	0.23371	0.05640	564
		O7Tb4-2	Tetraterbium heptaoxide	2.40	12037-01-3	0.13044	0.03148	315
		Sn	Tin	1.30	7440-31-5	0.07066	0.01705	170
			Barium Titanate	71.50	12047-27-7	3.88603	0.93775	9377
			Ytterby Oxide	3.40	1314-37-0	0.18479	0.04459	446
			Yttrium Oxide	1.50	1314-36-9	0.08153	0.01967	197
<b>Subtotal:</b>				<b>100.00</b>		<b>5.43500</b>	<b>1.31153</b>	<b>13115</b>

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Homogenous Material	Weight (mg)	Symbol	Chemical Substance	Input Ratio (%)	CAS Number	Unit Weight (mg)	Unit Weight (%)	Amount (ppm)
SIP Capacitor C3	1.4	Cu	Copper	15.60	7440-50-8	0.21840	0.05270	527
		Ni	Nickel	4.30	7440-02-0	0.06020	0.01453	145
		O7Tb4-2	Tetraterbium heptaoxide	2.40	12037-01-3	0.03360	0.00811	81
		Sn	Tin	1.30	7440-31-5	0.01820	0.00439	44
			Barium Titanate	71.50	12047-27-7	1.00100	0.24155	2416
			Ytterby Oxide	3.40	1314-37-0	0.04760	0.01149	115
			Yttrium Oxide	1.50	1314-36-9	0.02100	0.00507	51
		Subtotal:		100.00		1.40000	0.33784	3378
Total:	414.4					414.40	100.00000	1000000

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