



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D

* : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-03-17
Company Unique ID			
Contact Name *	Refer to Supplier comment section	Contact Title	Refer to Supplier comment section
Contact Phone *	Refer to Supplier comment section	Contact Email *	Refer to Supplier comment section
Authorized Representative *	Yves HALLEZ	Representative Title	IMG Material Declaration Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

Uncertainty Statement

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard

Legal Statement

Supplier certifies that it gathered the provided information and such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part(s), and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part(s), the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STB600B0/TR	AAC1*600H45K	B	AMKOR	2017-03-17
Amount	UoM	Unit type	ST ECOPACK Grade	
22	mg	Each	ECOPACK® 2	
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant			

Manufacturing information			
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	
1	260	3	
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment
Tin/Silver/Copper (SAC405)	Not Applicable	Copper Alloy	



Package Designator	Size	Nbr of instances	Shape
.	4.292 x 4.074	96	bulk solder
Comment	WLCSP		

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	TRUE

ELV directive : 2000/53/EC amended 2016/774 _May 2016	
Query	Response
1 - Product(s) meets EU ELV requirement without any exemptions	TRUE

Query : California Prop65 list, dated 27th January 2017	
Query	Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen	TRUE

QueryList : REACH- 12th January 2017	
Query	Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH	TRUE
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH	TRUE

Material Composition Declaration						Mfr Item Name	AAC1*600H45K		22.0000		1000001.0	1000001.0
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies or Wafer (choose)	Other inorganic materials	22.000	mg	supplier	die	Silicon (Si)	7440-21-3		14.672	mg	666909	666909
				supplier	metallisation	Aluminium (Al)	7429-90-5		0.036	mg	1636	1636
				supplier	metallisation	Copper (Cu)	7440-50-8		0.145	mg	6591	6591
				supplier	metallisation	Cobalt (Co)	7440-48-4		0.001	mg	45	45
				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.028	mg	1273	1273
				supplier	metallisation	Titanium (Ti)	7440-32-6		0.015	mg	682	682
				supplier	metallisation	Tungsten (W)	7440-33-7		0.002	mg	91	91
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.044	mg	2000	2000
				supplier	passivation	Silicon Oxide	7631-86-9		0.140	mg	6364	6364
				supplier	UBM	Copper (Cu)	7440-50-8		0.994	mg	45159	45159
				supplier	UBM	Titanium (Ti)	7440-32-6		0.024	mg	1110	1110
				supplier	UBM	Proprietary Polymer	proprietary		0.268	mg	12191	12191
				supplier	UBM	Additives	proprietary		0.014	mg	645	645
				supplier	UBM	Tungsten (W)	7440-33-7		0.008	mg	350	350
				supplier	bumps	Tin (Sn)	7440-31-5		5.357	mg	243482	243482
				supplier	bumps	Silver (Ag)	7440-22-4		0.224	mg	10198	10198
				supplier	bumps	Copper (Cu)	7440-50-8		0.028	mg	1275	1275