



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-04-21
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 *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_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
STM32F103C8T7	GE5B*410XXX2	A	9988	2015-04-21
Amount	UoM	Unit type	ST ECOPACK Grade	
329,00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	7x7x1.4	48	L bend	
Comment	LQFP 48 7x7x1.4			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th December 2013				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	GESB*41000X2					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	10,192	mg	supplier	die	Silicon (Si)	7440-21-3		9,860	mg	967425	29970
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0,029	mg	2845	88
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0,029	mg	2845	88
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0,060	mg	5887	182
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0,012	mg	1177	36
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,019	mg	1864	58
die (s)				supplier	passivation	Indium Tin oxide (In2O3·SnO2)	50926-11-9		0,183	mg	17955	556
Die Attach Epoxy	Other inorganic materials	0,689	mg	supplier	Glue	Epoxy Resin A	Proprietary (TS ref# 10013)		0,051	mg	74020	155
Die Attach Epoxy				supplier	Glue	Anhydride	Proprietary (TS ref# 10181)		0,051	mg	74020	155
Die Attach Epoxy				supplier	Glue	2,6-Diglycidyl phenyl allyl ether oligomer	Proprietary		0,020	mg	29028	61
Die Attach Epoxy				supplier	Glue	Epoxy resin B	Proprietary (TS ref# 10237)		0,020	mg	29028	61
Die Attach Epoxy				supplier	Glue	Epoxy resin modifier	Proprietary (TS ref# 10038)		0,020	mg	29028	61
Die Attach Epoxy				supplier	Glue	Anhydride	Proprietary (TS ref# 10180)		0,020	mg	29028	61
Die Attach Epoxy				supplier	Glue	Silver	7440-22-4		0,507	mg	735849	1541
Bonding Wire	Other inorganic materials	0,606	mg	supplier	Bonding Wire	Gold	7440-57-5		0,606	mg	1000000	1842
Lead Frame	Other inorganic materials	242,255	mg	supplier	Alloy	Copper	7440-50-8		230,608	mg	951923	700936
Lead Frame				supplier	Alloy	Iron	12597-68-1		5,524	mg	22802	16790
Lead Frame				supplier	Alloy	Phosphorus	7723-14-0		0,061	mg	252	185
Lead Frame				supplier	Alloy	Zinc	7440-66-6		0,305	mg	1259	927
Lead Frame				supplier	Alloy	Silver	7440-22-4		5,757	mg	23764	17498
Encapsulation	Other inorganic materials	73,493	mg	supplier	Molding compound	Silica Fused	60676-86-0		63,415	mg	862871	192751
Encapsulation				supplier	Molding compound	Epoxy Resin	Proprietary		5,905	mg	80348	17948
Encapsulation				supplier	Molding compound	Phenol Resin	Proprietary		3,937	mg	53570	11967
Encapsulation				supplier	Molding compound	Carbon Black	1333-86-4		0,236	mg	3211	717
Finishing	Other inorganic materials	1,765	mg	supplier	Connection coating	Tin	7440-31-5		1,765	mg	1000000	5365