



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 *	2013-12-16
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
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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
-	CGTH*24161TA	A	P1C7	2012-12-16
Amount	UoM	Unit type	ST ECOPACK Grade	
7.00	mg	Each		

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	
NAC	NiPdau	Copper		



Package Designator	Size	Nbr of instances	Shape	
QFP	1.7x1.4x0.55	5	No lead	
Comment	FPN 1.7x1.4x0.55 5L			

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-20th June 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	CGTH*24161TA					
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	0.1570	mg	supplier	die	Silicon (Si)	7440-21-3		0.1470	mg	936306	21000
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.0010	mg	6369	143
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.0010	mg	6369	143
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.0010	mg	6369	143
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.0070	mg	44586	1000
Lead-frame	Other inorganic materials	0.5682	mg	supplier	alloy	Copper (Cu)	7440-50-8		0.5389	mg	948382	76986
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.0130	mg	22831	1853
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.0007	mg	1168	95
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.0005	mg	817	66
Lead-frame				supplier	coating	Nickel (Ni)	7440-02-0		0.0140	mg	24571	1995
Lead-frame				supplier	coating	Palladium (Pd)	7440-05-3		0.0009	mg	1573	128
Lead-frame				supplier	coating	Gold (Au)	7440-57-5		0.0004	mg	657	53
Die Attach	Other inorganic materials	0.0789	mg	supplier	glue or soft solder	epoxy resin	25068-38-6		0.0079	mg	100000	1127
Die Attach				supplier	glue or soft solder	Cycloaliphatic Epoxy Resin	244772-00-7		0.0079	mg	100000	1127
Die Attach				supplier	glue or soft solder	Phenol resin	9003-35-4		0.0079	mg	100000	1127
Die Attach				supplier	glue or soft solder	amorphous silica	7631-86-9		0.0552	mg	700000	7891
Wires	Other inorganic materials	0.0106	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.0106	mg	1000000	1518
Encapsulation	Other inorganic materials	6.1851	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		5.4417	mg	879808	777386
Encapsulation				supplier	Moulding Compound	Phenolic resin	Proprietary		0.2850	mg	46074	40710
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.2230	mg	36058	31860
Encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		0.0124	mg	2003	1770
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.2230	mg	36058	31860
Finishing	Other inorganic materials	0.0002	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.0001	mg	916800	20
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0.0000	mg	58700	1
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0.0000	mg	24500	1