



## Materials Declaration Form

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

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2014-11-21
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Laurent TOSI	<b>Representative Title</b>	MMS MD CHAMPION
<b>Representative Phone *</b>	33 442 685 795	<b>Representative Email *</b>	<a href="mailto:laurent.tosi@st.com">laurent.tosi@st.com</a>
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
M24128-BFMH6TG	CGTH*24281TA	A	P1C7	2014-11-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	6.35	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nicke/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	1.7x1.4x0.6	5	No lead	
Comment	UFDFPN5			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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				<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	CGTH*24281TA					
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	0.4080	mg	supplier	die	Silicon (Si)	7440-21-3		0.3860	mg	946078	60787
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.0020	mg	4902	315
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.0020	mg	4902	315
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.0010	mg	2451	157
die (s)				supplier	passivation	Indium Tin oxide ( In2O3:SnO2 )	50926-11-9		0.0170	mg	41667	2677
Lead-frame	Other inorganic materials	3.2145	mg	supplier	alloy	Copper (Cu)	7440-50-8		3.1230	mg	971532	491808
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0.0752	mg	23389	11840
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0.0038	mg	1196	606
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.0027	mg	837	424
Lead-frame				supplier	coating	Nickel (Ni)	7440-02-0		0.0090	mg	2792	1413
Lead-frame				supplier	coating	Palladium (Pd)	7440-05-3		0.0006	mg	179	91
Lead-frame				supplier	coating	Gold (Au)	7440-57-5		0.0002	mg	75	38
Die Attach	Other inorganic materials	0.1104	mg	supplier	glue or soft solder	epoxy resin	25068-38-6		0.0110	mg	100000	1738
Die Attach				supplier	glue or soft solder	Cycloaliphatic Epoxy Resin	244772-00-7		0.0110	mg	100000	1738
Die Attach				supplier	glue or soft solder	Phenol resin	9003-35-4		0.0110	mg	100000	1738
Die Attach				supplier	glue or soft solder	amorphous silica	7631-86-9		0.0773	mg	700000	12168
Wires	Other inorganic materials	0.0106	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.0106	mg	1000000	1673
Encapsulation	Other inorganic materials	2.6064	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		2.2760	mg	873249	358425
Encapsulation				supplier	Moulding Compound	Phenolic resin	Proprietary		0.1266	mg	48588	19943
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.0991	mg	38025	15608
Encapsulation				supplier	Moulding Compound	carbon black	1333-86-4		0.0055	mg	2113	867
Encapsulation				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.0991	mg	38025	15608
Finishing	Other inorganic materials	0.0001	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0.0001	mg	916800	14
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	0