



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 *	2015-05-13
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
STM8TL52F4P6	P1YA*769XXXZ	A	9998	2013-12-12
Amount	UoM	Unit type	ST ECOPACK Grade	
72,00	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	NiPdAu	Copper		

Package Designator	Size	Nbr of instances	Shape	
DIP	NAC	20	Through-hole	
Comment	TSSOP 20L BODY 4.40mm LEAD PITCH 0.65mm			

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	P1YA*769XXXZ					
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	3,809	mg	supplier	die	Silicon (Si)	7440-21-3		3,6830	mg	966920	51153
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0,0100	mg	2625	139
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0,0440	mg	11552	611
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0,0030	mg	788	42
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0,0050	mg	1313	69
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,0090	mg	2363	125
die (s)				supplier	passivation	Silicon Oxide (SiO2)	7631-86-9		0,0550	mg	14439	764
Lead-frame	Other inorganic materials	37,656	mg	supplier	alloy	Copper (Cu)	7440-50-8		36,6926	mg	974416	509619
Lead-frame				supplier	alloy	Iron (Fe)	7439-89-6		0,8863	mg	23538	12310
Lead-frame				supplier	alloy	Zinc (Zn)	7440-66-6		0,0453	mg	1204	630
Lead-frame				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0,0317	mg	843	441
Lead-frame Coating	Other inorganic materials	0,219	mg	supplier	coating	Nickel (Ni)	7440-02-0		0,2006	mg	916800	2786
Lead-frame Coating				supplier	coating	Palladium (Pd)	7440-05-3		0,0128	mg	58700	178
Lead-frame Coating				supplier	coating	Gold (Au)	7440-57-5		0,0054	mg	24500	74
Die Attach	Other inorganic materials	1,795	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		1,4361	mg	800000	19946
Die Attach				supplier	glue or soft solder	Epoxy resin (molecular weight <= 700g)	9003-36-5		0,1436	mg	80000	1995
Die Attach				supplier	glue or soft solder	Epoxy resin	68475-94-5		0,0539	mg	30000	748
Die Attach				supplier	glue or soft solder	2,6-Diglycidyl phenyl allyl ether oligomer	CE 417-470-1		0,0539	mg	30000	748
Die Attach				supplier	glue or soft solder	Lactone	na		0,0539	mg	30000	748
Die Attach				supplier	glue or soft solder	Polyoxypropylenediamine	9046-10-0		0,0539	mg	30000	748
Wires	Other inorganic materials	0,279	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		0,2790	mg	1000000	3875
Encapsulation	Other inorganic materials	28,240	mg	supplier	Moulding Compound	Epoxy Resin	na		2,1180	mg	75000	29417
Encapsulation				supplier	Moulding Compound	Phenol Resin	na		1,4120	mg	50000	19611
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		24,4558	mg	866000	339663
Encapsulation				supplier	Moulding Compound	Carbon-black	1333-86-4		0,1412	mg	5000	1961
Encapsulation				supplier	Bismuth/Bismuth Compounds	Bismuth	7440-69-9		0,1130	mg	4000	1569
Finishing	Other inorganic materials	0,002	mg	supplier	connections coating	Nickel (Ni)	7440-02-0		0,0020	mg	916800	28
Finishing				supplier	connections coating	Palladium (Pd)	7440-05-3		0,0001	mg	58700	2
Finishing				supplier	connections coating	Gold (Au)	7440-57-5		0,0001	mg	24500	1