



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 *	2017-07-28
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


While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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
ST7FMC2S4T3	U14Y*842XXX3	A	959	2017-07-28
Amount	UoM	Unit type	ST ECOPACK Grade	
350,00	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	NiPdAu	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	44	L bend	
Comment	LQFP 44 10x10x1.4 FOOTPRINT 1.0			

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-15th June 2015				
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	U14Y*842XXX3					
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)	M-011 Other inorganic materials	13,289	mg	supplier	die	Silicon (Si)	7440-21-3		13,231	mg	995635	37803
				supplier	metallization	Titanium (Ti)	7440-32-6		0,009	mg	677	26
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,012	mg	903	34
Lead-frame	M-011 Other inorganic materials	76,774	mg	supplier	passivation	Indium Tin oxide (In2O3·SnO2)	50926-11-9		0,037	mg	2784	106
				supplier	alloy	Copper (Cu)	7440-50-8		73,856	mg	962000	211018
				supplier	alloy	Nickel (Ni)	7440-02-0		2,303	mg	30000	6581
Lead-frame Coating	M-011 Other inorganic materials	0,618	mg	supplier	alloy	Silicium (Si)	7440-21-3		0,499	mg	6500	1426
				supplier	alloy	Magnesium (Mg)	7439-95-4		0,115	mg	1500	329
				supplier	coating	Nickel (Ni)	7440-02-0		0,567	mg	916800	1619
Die Attach	M-011 Other inorganic materials	3,604	mg	supplier	coating	Palladium (Pd)	7440-05-3		0,036	mg	58700	104
				supplier	coating	Gold (Au)	7440-57-5		0,015	mg	24500	43
				supplier	glue or soft solder	Silver (Ag)	7440-22-4		2,775	mg	770000	7930
Wires	M-011 Other inorganic materials	0,974	mg	supplier	glue or soft solder	epoxy resin	29690-82-2		0,822	mg	228000	2348
				supplier	glue or soft solder	Dibutyl Phthalate	84-74-2		0,007	mg	2000	21
				supplier	Bonding wire	Gold (Au)	7440-57-5		0,974	mg	1000000	2784
Encapsulation	M-011 Other inorganic materials	254,734	mg	supplier	Moulding Compound	Silica, vitreous	60676-86-0		220,062	mg	863888	628748
				supplier	Moulding Compound	Epoxy resin	Proprietary		20,547	mg	80659	58704
				supplier	Moulding Compound	Phenol resin	Proprietary		12,842	mg	50412	36690
Finishing	M-011 Other inorganic materials	0,006	mg	supplier	Moulding Compound	Carbon Black	1333-86-4		1,284	mg	5041	3669
				supplier	connections coating	Nickel (Ni)	7440-02-0		0,006	mg	916800	16
				supplier	connections coating	Palladium (Pd)	7440-05-3		0,000	mg	58700	1
				supplier	connections coating	Gold (Au)	7440-57-5		0,000	mg	24500	0