



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 *	2015-12-21
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


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
STM32L486ZGT6	P41A*415XXX4	A	9998	2015-12-21
Amount	UoM	Unit type	ST ECOPACK Grade	
1315,00	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	20x20x1.4	144	L bend	
Comment	Package: 1A LQFP 144 20X20X1.4 2 0099183			

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	P41A*415XXX4					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	16,506	mg	supplier	die	Silicon (Si)	7440-21-3		14,731	mg	892463	11202
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0,027	mg	1636	21
Die or Dies				supplier	metallization	Copper (Cu)	7440-50-8		0,242	mg	14661	184
Die or Dies				supplier	metallization	Tantalum (Ta)	7440-25-7		1,283	mg	77729	976
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0,001	mg	61	1
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0,003	mg	182	2
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0,002	mg	121	2
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,061	mg	3696	46
Die or Dies				supplier	passivation	Silicon Oxide (SiO2)	7631-86-9		0,156	mg	9451	119
LEADFRAME (MHT- C194)	Other inorganic materials	396,870	mg	supplier	ALLOY	Copper (Cu)	7440-50-8		386,750	mg	974500	294106
LEADFRAME (MHT- C194)				supplier	ALLOY	Iron (Fe)	7439-89-6		9,525	mg	24000	7243
LEADFRAME (MHT- C194)				supplier	ALLOY	Zinc (Zn)	7440-66-6		0,476	mg	1199	362
LEADFRAME (MHT- C194)				supplier	ALLOY	Phosphorus (P)	7723-14-0		0,119	mg	300	90
LEADFRAME (MHT- Ag)	Other inorganic materials	2,560	mg	supplier	COATING	Silver(Ag)	7440-22-4		2,560	mg	1000000	1947
DIE ATTACH (Evertech -AP4200)	Other inorganic materials	0,009	mg	supplier	GLUE	Epoxy	9003-36-5		0,002	mg	222222	2
DIE ATTACH (Evertech -AP4200)				supplier	GLUE	Silver(Ag)	7440-22-4		0,007	mg	777778	5
BONDING WIRE (Tanaka - PCC wire)	Other inorganic materials	1,363	mg	supplier	BONDING WIRE	Copper (Cu)	7440-50-8		1,332	mg	977256	1013
BONDING WIRE (Tanaka - PCC wire)				supplier	BONDING WIRE	Palladium (Pd)	7440-41-7		0,031	mg	22744	24
ENCAPSULATION (Sumitomo -G631HC)	Other inorganic materials	889,834	mg	supplier	MOLDING COMPOUND	Epoxy Resin	Trade secret		89,160	mg	100198	67802
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Silica fused (SiO3)	60676-86-0		747,178	mg	839682	568196
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Phenol Resin	Trade secret		49,038	mg	55109	37291
ENCAPSULATION (Sumitomo -G631HC)				supplier	MOLDING COMPOUND	Carbon Black	1333-86-4		4,458	mg	5010	3390
FINISHING - (S1380 -Sn)	Other inorganic materials	7,858	mg	supplier	EXTERNAL PLATING	Tin (Sn)	7440-31-5		7,858	mg	1000000	5976