Materials Declaration Form

IPC	**1752**	**Version**	**2**
Form Type *	Distribute		
Sectionals *	Material Info Manufacturing Info	**Subsectionals ***	A-D *** : Required Field***

Supplier Information			
Company Name *	STMicroelectronics	**Response Date ***	2016-02-09
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 *	Emilio Castelli	**Representative Title**	APG MD CHAMPION
Representative Phone *	Refer to " Supplier Comment" section	**Representative Email ***	Refer to " Supplier Comment" section
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.

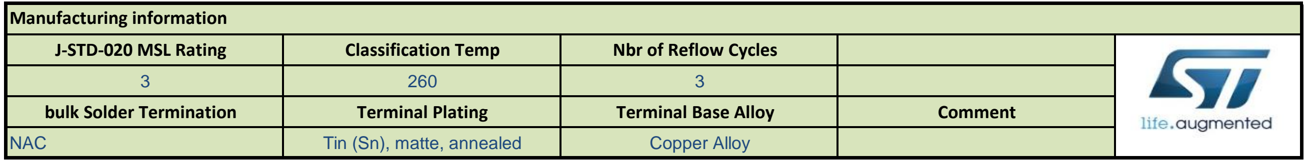
Legal Statement

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 omprehensive 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**
VN7050AJTR	A0M5*XV10AE5	A	BO2A	2016-02-09
	Amount	**UoM**	**Unit type**	**ST ECOPACK Grade**
	150.00	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, annealed	Copper Alloy		

Package Designator	**Size**	**Nbr of instances**	**Shape**	
CHP	4.9x3.9x1.35	16	pin	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)	**true**
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-17th Dec 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	A0M5*XV10AE5					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	2.419	mg	supplier	die	Silicon (Si)	7440-21-3		2.300	mg	950806	15333
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.044	mg	18189	293
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	1240	20
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.027	mg	11162	180
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.025	mg	10335	167
Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.001	mg	413	7
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.003	mg	1240	20
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.016	mg	6614	107
Leadframe	Copper & its alloys	119.691	mg	supplier	alloy	Copper (Cu)	7440-50-8		116.165	mg	970541	774433
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.732	mg	22825	18213
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.165	mg	1379	1100
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.143	mg	1195	953
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0.486	mg	4060	3240
Die attach		2.227	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	2.126	mg	954648	14173
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.056	mg	25146	373
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.045	mg	20207	300
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.417	mg	1000000	2780
encapsulation		23.518	mg	supplier	mold compound	Epoxy Resin	85954-11-6		1.881	mg	79981	12540
encapsulation				supplier	mold compound	Phenol Resin	26834-02-6		0.941	mg	40012	6273
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		20.484	mg	870992	136560
encapsulation				supplier	mold compound	Carbon black	1333-86-4		0.118	mg	5017	787
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		0.094	mg	3997	627
connections coating	Solder	1.728	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		1.728	mg	1000000	11520