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Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2016-09-01
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	FLORIANA SAN BIAGIO	Representative Title	AMG 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/support.html		

Uncertainty Statement

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Legal Statement


Supplier Acceptance *	true	Legal Declaration *	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
	MZ80*LU05FC1	A	SH1A	2016-09-01
Amount	UoM	Unit type	ST ECOPACK Grade	
1900.00	mg	Each	ECOPACK® 1	
	Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	10.2x9.1x4.5	3	Through-hole	
Comment	Package: 80 TO 220 CU Wire on CU; MDF valid for LD1085V50			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	FALSE
2 - 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
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-20th June 2016				
Query				Response
1 - Product(s) 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	M280*LU05FC1					
note : Substance present with less 0.001mg will not be declared in this document												
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	6.611	mg	supplier	die	Silicon (Si)	7440-21-3		6.454	mg	976252	3397
				supplier	metallization	Aluminium (Al)	7429-90-5		0.060	mg	9076	32
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	3177	11
				supplier	Passivation	Silicon Oxide	7631-86-9		0.029	mg	4387	15
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.004	mg	605	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.010	mg	1513	5
Leadframe	Copper & its alloys	1236.077	mg	supplier	back side metallization	Nickel (Ni)	7440-02-0		0.033	mg	4992	17
				supplier	alloy	Copper (Cu)	7440-50-8		1234.470	mg	998700	649721
				supplier	alloy	Iron (Fe)	7439-89-6		0.618	mg	500	325
Soft solder	Solder	4.137	mg	supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.989	mg	800	521
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.951	mg	955040	2079
				supplier	solder	Silver (Ag)	7440-22-4		0.103	mg	24897	54
Bonding wires	Other inorganic materials	0.402	mg	supplier	solder	Tin (Sn)	7440-31-5		0.083	mg	20063	44
				supplier	wire	Copper (Cu)	7440-50-8		0.402	mg	1000000	212
				supplier	Other Organic Materials	Encapsulation	646.618	mg	supplier	mold compound	Silica vitreous	60676-86-0
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		61.429	mg	95000	32331
				supplier	mold compound	Phenol resin	9003-35-4		54.316	mg	84000	28587
				supplier	mold compound	Antimony Trioxide	1309-64-4		10.993	mg	17001	5786
				supplier	mold compound	Brominated flame retardant	Proprietary		9.699	mg	15000	5105
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.233	mg	5000	1702
connections coating	Solder	6.155	mg	supplier	mold compound	Carbon Black	1333-86-4		2.587	mg	4001	1362
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.155	mg	1000000	3239