



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 *	2016-07-29
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	ADG 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		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<p>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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
FERD40M45CT	RTDZ*ACY316T	A	SHENZHEN B/E	2016-07-29
	Amount	UoM	Unit type	ST ECOPACK Grade
	1900.00	mg	Each	ECOPACK2

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

Package Designator	Size	Nbr of instances	Shape	
SIP	10-9.1-4.5	3	THROUGH HOLE	
Comment	TO 220 AB NON ISOL			

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
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	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	RTDZ*ACY316T									
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	11.731	mg	supplier	die	Silicon (Si)	7440-21-3		11.481	mg	978691	6043				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.107	mg	9121	56				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.047	mg	4006	25				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.006	mg	511	3				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.017	mg	1449	9				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.068	mg	5796	36				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.005	mg	426	3				
				Leadframe	Copper & its alloys	1259.453	mg	supplier	alloy	Copper (Cu)	7440-50-8		1251.376	mg	993587	658619
								supplier	alloy	Iron (Fe)	7439-89-6		1.253	mg	994	659
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.376	mg	299	198				
supplier	metallization	Nickel (Ni)	7440-02-0						6.408	mg	5088	3373				
supplier	metallization	Phosphorus (P)	12185-10-3						0.040	mg	32	21				
supplier	alloy	Lead (Pb)	7439-92-1					7a-Lead in high mel	10.297	mg	954929	5419				
Die attach	Other Organic Materials	10.783	mg	supplier	solder	Silver (Ag)	7440-22-4		0.270	mg	25039	142				
				supplier	solder	Tin (Sn)	7440-31-5		0.216	mg	20032	115				
				supplier	Ribbon	Aluminium (Al)	7429-90-5		8.083	mg	1000000	4254				
Bonding Ribbons	Other Nonferrous metals & alloys	8.083	mg	supplier	Ribbon	Aluminium (Al)	7429-90-5		8.083	mg	1000000	4254				
				Encapsulation	Other Organic Materials	603.588	mg	supplier	mold compound	Silica, vitreous	60676-86-0		525.121	mg	869999	276379
								supplier	mold compound	Epoxy resin	25068-38-6		60.359	mg	100000	31768
								supplier	mold compound	Phenol resin	29690-82-2		15.090	mg	25000	7942
Connections coating	Solder	6.362	mg	supplier	mold compound	Carbon Black	1333-86-4		3.018	mg	5001	1588				
				supplier	solder alloy	Tin (Sn)	7440-31-5		6.362	mg	1000000	3348				