




## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-10-08
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Rossana Bonaccorso	<b>Representative Title</b>	IPD MD Champion
<b>Representative Phone *</b>	Refer to Supplier Comment section	<b>Representative Email *</b>	Refer to Supplier Comment section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/support.html">http://www.st.com/web/en/support/support.html</a>		

Uncertainty Statement			
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Legal Statement			
<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
<b>Legal Statement</b>	<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
FERD20S100STS	HTJK*ACV1360	A	SHENZHEN B/E	2015-10-08
	Amount	UoM	Unit type	ST ECOPACK Grade
	1384.00	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	10.2, 9.15, 4.5	4	THROUGH HOLE	
Comment	TO220 - SINGLE GAUGE			

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-15th June 2015				
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	HTJK*ACV1360					
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	2.415	mg	supplier	die	Silicon (Si)	7440-21-3		2.340	mg	968944	1691
				supplier	metallization	Aluminium (Al)	7429-90-5		0.031	mg	12836	22
				supplier	Passivation	Silicon Oxide	7631-86-9		0.013	mg	5383	9
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	828	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.023	mg	9524	17
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	414	1
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.005	mg	2070	4
Leadframe	Copper & its alloys	761.584	mg	supplier	alloy	Copper (Cu)	7440-50-8		760.594	mg	998700	549562
				supplier	alloy	Iron (Fe)	7439-89-6		0.350	mg	460	253
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.640	mg	840	462
Soft solder	Solder	3.191	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	3.047	mg	954873	2202
				supplier	solder	Silver (Ag)	7440-22-4		0.080	mg	25071	58
				supplier	solder	Tin (Sn)	7440-31-5		0.064	mg	20056	46
Bonding wires	Other inorganic materials	4.706	mg	supplier	wire	Aluminium (Al)	7429-90-5		4.706	mg	1000000	3400
				supplier	mold compound	Silica, vitreous	60676-86-0		525.151	mg	870000	379444
Encapsulation	Other Organic Materials	603.622	mg	supplier	mold compound	Epoxy resin	25068-38-6		60.362	mg	100000	43614
				supplier	mold compound	Phenol resin	29690-82-2		15.091	mg	25001	10904
				supplier	mold compound	Carbon Black	1333-86-4		3.018	mg	5000	2181
Connections coating	Solder	8.482	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		8.482	mg	1000000	6129