



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-07-28
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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		

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
FERD40L60CG-TR	HTD2*EKU936V	A	3068	2017-07-28
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	mg	Each	ECOPACK2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
SIP	10.2-9.15-4.5	2	gull wing	
Comment	D2PAK			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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)

Query : California Prop65 list, dated 27th January 2017			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.13	die backside metal-leadframe metal	93
Lead	7.69	solder	5572

QueryList : REACH-12th January 2017				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	HTD2*EKU936V					
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	6.517	mg	supplier	die	Silicon (Si)	7440-21-3		6.190	mg	949824	4486
				supplier	metallization	Aluminium (Al)	7429-90-5		0.036	mg	5524	26
				supplier	metallization	Copper (Cu)	7440-50-8		0.119	mg	18260	86
				supplier	metallization	Titanium (Ti)	7440-32-6		0.092	mg	14117	67
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.004	mg	613	3
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.051	mg	7826	37
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.004	mg	614	3
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.021	mg	3222	15
Leadframe	Copper & its alloys	778.632	mg	supplier	alloy	Copper (Cu)	7440-50-8		777.537	mg	998594	563433
				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	460	259
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.654	mg	840	474
				supplier	metallization	Nickel (Ni)	7440-02-0		0.077	mg	98	56
				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
Soft solder	Solder	8.051	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	7.689	mg	955037	5572
				supplier	solder	Silver (Ag)	7440-22-4		0.201	mg	24965	146
				supplier	solder	Tin (Sn)	7440-31-5		0.161	mg	19998	115
Bonding wires	Other inorganic materials	10.288	mg	supplier	wire	Aluminium (Al)	7429-90-5		10.288	mg	1000000	7455
Encapsulation	Other Organic Materials	574.023	mg	supplier	mold compound	Silica, vitreous	60676-86-0		502.270	mg	875000	363964
				supplier	mold compound	Tetramethyl-biphenyl-diy-bis oxymethylene-bi	EC 413-900-7		22.961	mg	40000	16638
				supplier	mold compound	Epoxy Resin	25068-38-6		17.221	mg	30000	12479
				supplier	mold compound	phenol resin	29690-82-2		28.701	mg	50000	20798
				supplier	mold compound	Carbon black	1333-86-4		2.870	mg	5000	2080
Connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804