



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 *	2016-10-24
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
TDA7850A	H848*UN01AF6	A	SHENZHEN B/E	2016-10-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	7101.67	mg	Each	ECOPACK2

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	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	28.9-15.5-4.5	27	gull wing	
Comment	FLEXIWATT FM2 27 LDS			

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)		true
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		true
5 - Product(s) is obsolete, no information is available		true
6 - Product(s) is unknown, no information is available		true
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	H848*UN01AF6					
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	26.278	mg	supplier	die	Silicon (Si)	7440-21-3		25.052	mg	953343	3527
				supplier	metallization	Aluminium (Al)	7429-90-5		0.165	mg	6279	23
				supplier	metallization	Tungsten (W)	7440-33-7		0.261	mg	9933	37
				supplier	Passivation	Silicon Nitride	12033-89-5		0.040	mg	1522	6
				supplier	Passivation	Silicon Oxide	7631-86-9		0.386	mg	14690	54
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.014	mg	533	2
				supplier	back side metallization	Gold (Au)	7440-57-5		0.038	mg	1446	5
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.128	mg	4871	18
				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.194	mg	7383	27
				supplier	alloy	Copper (Cu)	7440-50-8		5205.301	mg	998700	732969
Leadframe	Copper & its alloys	5212.077	mg	supplier	alloy	Iron (Fe)	7439-89-6		2.398	mg	460	338
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.378	mg	840	616
				supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	17.165	mg	975007	2417
				supplier	solder	Silver (Ag)	7440-22-4		0.264	mg	14996	39
Soft solder	Solder	17.605	mg	supplier	solder	Tin (Sn)	7440-31-5		0.176	mg	9997	25
				supplier	wire	Copper (Cu)	7440-50-8		2.459	mg	1000000	346
Bonding wires	Other inorganic materials	2.459	mg	supplier	wire	Copper (Cu)	7440-50-8		2.459	mg	1000000	346
				supplier	mold compound	Amorphous silica	7631-86-9		1546.552	mg	850000	217773
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		109.168	mg	60000	15372
				supplier	mold compound	Phenol resin	25068-38-6		72.779	mg	40000	10248
				supplier	mold compound	Other	Proprietary		72.779	mg	40000	10248
				supplier	mold compound	carbon black	1333-86-4		12.736	mg	7000	1793
Encapsulation	Other Organic Materials	1819.472	mg	supplier	mold compound	Bismuth (Bi)	7440-69-9		5.458	mg	3000	769
				supplier	solder alloy	Tin (Sn)	7440-31-5		23.779	mg	1000000	3348
Connections coating	Solder	23.779	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		23.779	mg	1000000	3348