



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 *	2018-02-20
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		

Uncertainty Statement

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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
	HREH*UR85BX1	A	0959	2018-02-20
Amount	UoM	Unit type	ST ECOPACK Grade	
1925.00	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NA	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFP	10.3-7.5-2.28	36	Gull Wing	
Comment	Package: PowerSSO36 - MDF valid for CPs: FDA803D-EHX and FDA803D-EHT			

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)

QueryList : California Prop65 list, dated 15th December 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	0.02	Die	11
Lead	5.46	Soft solder	2837
Cobalt	0.001	Die	1

QueryList : REACH-15th January 2018				
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	HREH*UR85BX1									
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	8.251	mg	supplier	die	Silicon (Si)	7440-21-3		7.461	mg	904254	3876				
				supplier	metallization	Copper (Cu)	7440-50-8		0.508	mg	61568	264				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	122	1				
				supplier	metallization	Platinum (Pt)	7440-06-4		0.032	mg	3878	17				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	121	1				
				supplier	metallization	Tungsten (W)	7440-33-7		0.024	mg	2909	12				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.020	mg	2424	10				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.081	mg	9817	42				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.004	mg	485	2				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.011	mg	1333	6				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.021	mg	2545	11				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	121	1				
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.086	mg	10423	45				
				Leadframe	Copper & its alloys	161.652	mg	supplier	alloy	Copper (Cu)	7440-50-8		155.396	mg	961300	80725
								supplier	alloy	Iron (Fe)	7439-89-6		3.655	mg	22610	1899
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.220	mg	1361	114				
supplier	alloy	Zinc (Zn)	7440-66-6						0.191	mg	1181	99				
supplier	metallization	Silver (Ag)	7440-22-4						2.190	mg	13548	1138				
Soft solder	Solder	5.601	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	5.461	mg	975004	2837				
				supplier	solder	Silver (Ag)	7440-22-4		0.084	mg	14998	44				
				supplier	solder	Tin (Sn)	7440-31-5		0.056	mg	9998	29				
Bonding wires	Other inorganic materials	2.452	mg	supplier	wire	Copper (Cu)	7440-50-8		2.452	mg	1000000	1274				
				supplier	wire	Silicon (Si)	7440-21-3		0.001	mg	1000000	1274				
Encapsulation	Other Organic Materials	1742.792	mg	supplier	mold compound	silica vitreous	60676-86-0		1530.171	mg	878000	794894				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		104.567	mg	60000	54321				
				supplier	mold compound	Phenol Resin	205830-20-2		69.712	mg	40000	36211				
				supplier	mold compound	epoxy resin	25068-38-6		34.856	mg	20000	18107				
				supplier	mold compound	carbon black	1333-86-4		3.486	mg	2000	1811				
Connections coating	Solder	4.252	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	2209				