



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 *	2017-09-12
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giuseppe Vitali Palma	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 omprehensive 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
	AREH*UAE2AEX	A	0959	2017-09-12
Amount	UoM	Unit type	ST ECOPACK Grade	
484.70	mg	Each	ECOPACK2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
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: POWERSO36; MD VALID FOR L5963D-EHX, L5963D-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)

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	0.03	Die back side metal - Leadframe metal	54
Lead	6.59	Soft solder	13586

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	AREH*UAE2AEX									
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	10.068	mg	supplier	die	Silicon (Si)	7440-21-3		9.099	mg	903754	18772				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.022	mg	2186	45				
				supplier	metallization	Copper (Cu)	7440-50-8		0.560	mg	55622	1155				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	99	2				
				supplier	metallization	Platinum (Pt)	7440-06-4		0.039	mg	3874	80				
				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	596	12				
				supplier	metallization	Tungsten (W)	7440-33-7		0.032	mg	3178	66				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.018	mg	1788	37				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.140	mg	13905	289				
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	497	10				
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1391	29				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.026	mg	2582	54				
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.001	mg	99	2				
				supplier	polymer die coating	Polyimide AH 1200	Proprietary		0.105	mg	10429	217				
				Leadframe	Copper & its alloys	161.652	mg	supplier	alloy	Copper (Cu)	7440-50-8		155.396	mg	961300	320602
								supplier	alloy	Iron (Fe)	7439-89-6		3.655	mg	22609	7541
								supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.220	mg	1361	457
supplier	alloy	Zinc (Zn)	7440-66-6						0.191	mg	1182	394				
supplier	metallization	Silver (Ag)	7440-22-4						2.190	mg	13548	4518				
Soft solder	Solder	6.754	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	6.585	mg	974978	13586				
				supplier	solder	Silver (Ag)	7440-22-4		0.101	mg	14954	208				
				supplier	solder	Tin (Sn)	7440-31-5		0.068	mg	10068	140				
Bonding wire	Other inorganic materials	2.810	mg	supplier	wire	Copper (Cu)	7440-50-8		2.810	mg	1000000	5797				
Encapsulation	Other Organic Materials	299.164	mg	supplier	mold compound	silica vitreous	60676-86-0		262.666	mg	878000	541915				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		17.950	mg	60001	37033				
				supplier	mold compound	Phenol Resin	205830-20-2		11.967	mg	40001	24689				
				supplier	mold compound	epoxy resin	25068-38-6		5.983	mg	19999	12344				
Connections coating	Solder	4.252	mg	supplier	mold compound	carbon black	1333-86-4		0.598	mg	1999	1234				
				supplier	solder alloy	Tin (Sn)	7440-31-5		4.252	mg	1000000	8772				