



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 *	2015-01-27
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Giovanni Giacopello	Representative Title	AMS & IPD Materials Declaration 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/online_tech_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
	7SER*Z81P15R	A	SH1A	2015-01-27
Amount	UoM	Unit type	ST ECOPACK Grade	
95.00	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles	 life.augmented	
1	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy		
Not Applicable ; if coating is used o	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	pin	
Comment	Package: Power FLAT 5x6 8L SINGLE; MDF valid for STPS30170DJF-TR			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	true
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
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-16th June 2014				
Query				Response
The product 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	7SER*281P15R					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	4.755	mg	supplier	die	Silicon (Si)	7440-21-3		4.492	mg	944690	47284
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.04	mg	8412	421
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	1262	63
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.009	mg	1893	95
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.029	mg	6099	305
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.028	mg	5889	295
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.039	mg	8202	411
die (s)				supplier	passivation	Gamma-butyrolactone	96-48-0		0.037	mg	7781	389
die (s)				supplier	passivation	Polyhydroxyamide	55295-98-2		0.017	mg	3575	179
die (s)				supplier	passivation	Alcoxysilane	proprietary		0.001	mg	210	11
die (s)				supplier	passivation	Aryl Silicic Acid	proprietary		0.001	mg	210	11
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	631	32
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0.009	mg	1893	95
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0.044	mg	9253	463
Leadframe	Copper & its alloys	42.248	mg	supplier	alloy	Copper (Cu)	7440-50-8		40.794	mg	965584	429411
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.959	mg	22699	10095
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.058	mg	1373	611
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0.05	mg	1183	526
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0.385	mg	9113	4053
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.002	mg	47	21
Soft solder	Solder	4.21	mg	JIG Table A	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.021	mg	955107	42326
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.105	mg	24941	1105
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.084	mg	19952	884
Ribbon	Other inorganic materials	0.975	mg	supplier	ribbon	Aluminium (Al)	7429-90-5		0.975	mg	1000000	10263
encapsulation	Other inorganic materials	42.663	mg	supplier	mold compound	Silica, vitreous	60676-86-0		39.506	mg	926001	415853
encapsulation				supplier	mold compound	epoxy resin	85954-11-6		1.707	mg	40011	17968
encapsulation				supplier	mold compound	phenol resin	26834-02-6		1.28	mg	30003	13474
encapsulation				supplier	mold compound	carbon black	1333-86-4		0.17	mg	3985	1789
connections coating	Solder	0.149	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.149	mg	1000000	1568