



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 *	2015-07-21
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Rossana Bonaccorso	Representative Title	IPD 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	<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
L6229D	A59U*UR38AE6	A	MUAR B/E	2015-07-21
Amount		UoM	Unit type	ST ECOPACK Grade
653.38		mg	Each	ECOPACK1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	250	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	NiPdAu	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
DSO	7.5, 15.4, 2.5	24	GULL WING	
Comment	Package: SO 24 .30 TO JEDEC MS-013AD			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
5 - Product(s) is obsolete, no information is available	false
6 - Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-17th December 2014				
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	A59U*UR38AE6		653.3800			
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies (choose)	Other inorganic materials	9.463	mg	supplier	die	Silicon (Si)	7440-21-3		9.108	mg	962485	13940
				supplier	metallization	Aluminium (Al)	7429-90-5		0.069	mg	7292	106
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	845	12
				supplier	Passivation	Silicon Nitride	12033-89-5		0.020	mg	2113	31
				supplier	Passivation	Silicon Oxide	7631-86-9		0.119	mg	12575	182
				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.005	mg	528	8
				supplier	back side metallization	Gold (Au)	7440-57-5		0.014	mg	1479	21
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.046	mg	4861	70
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.074	mg	7820	113
Leadframe	Copper & Its alloys	202.066	mg	supplier	alloy	Copper (Cu)	7440-50-8		196.685	mg	973370	301027
				supplier	alloy	Iron (Fe)	7439-89-6		4.626	mg	22894	7080
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.279	mg	1381	427
				supplier	alloy	Zinc (Zn)	7440-66-6		0.242	mg	1198	370
				supplier	metallization	Nickel (Ni)	7440-02-0		0.214	mg	1059	328
				supplier	metallization	Palladium (Pd)	7440-05-3		0.014	mg	69	21
				supplier	metallization	Gold (Au)	7440-57-5		0.006	mg	30	9
Die attach	Other Organic Materials	2.034	mg	supplier	glue or tape	Silver (Ag)	7440-22-4		1.566	mg	769912	2397
				supplier	glue or tape	Epoxy Cresol Novolak	29690-82-2		0.460	mg	226155	704
				supplier	glue or tape	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.008	mg	3933	12
				supplier	wire	Gold (Au)	7440-57-5		0.478	mg	1000000	732
Encapsulation	Other Organic Materials	439.339	mg	supplier	mold compound	Silica, vitreous	60676-86-0		354.107	mg	805999	541962
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		30.754	mg	70001	47069
				supplier	mold compound	Phenol resin	9003-35-4		17.574	mg	40001	26897
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		26.360	mg	59999	40344
				supplier	mold compound	Antimony Trioxide	1309-64-4		5.272	mg	12000	8069
				supplier	mold compound	Brominated Epoxy Resin	40039-93-8		3.075	mg	6999	4706
				supplier	mold compound	Carbon black	1333-86-4		2.197	mg	5001	3363