



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 *	2014-07-03
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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard
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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
	TODP*MQ40B6F	A	Z8GA	2014-07-03
Amount	UoM	Unit type	ST ECOPACK Grade	
355.00	mg	Each	ECOPACK® 2	

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



Package Designator	Size	Nbr of instances	Shape	
SIP	6.5,6.1,2.3	3	gull wing	
Comment	Package: TO 252 DPAK; MDF valid for STD9N40M2			

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 December 2013				
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	TODP*MQ40B6F					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Silicon Die	Other inorganic materials	3.575	mg	supplier	die	Silicon (Si)	7440-21-3		3.436	mg	961119	9679
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.066	mg	18462	186
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.016	mg	4476	45
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.024	mg	6713	68
Silicon Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	559	6
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.023	mg	6434	65
Silicon Die				supplier	back side metallization	Silver (Ag)	7440-22-4		0.008	mg	2238	23
Leadframe	Copper & its alloys	199.596	mg	supplier	alloy	Copper(CU)	7440-50-8		199.241	mg	998221	561242
Leadframe				supplier	alloy	Tin(Sn)	7440-31-5		0.239	mg	1197	673
Leadframe				supplier	alloy	Nickel	7440-02-0		0.116	mg	581	327
Die attach	Solder	2.002	mg	supplier	glue or tape	Tin(Sn)	7440-31-5		0.04	mg	19980	113
Die attach				supplier	glue or tape	Silver(Ag)	7440-22-4		0.05	mg	24975	141
Die attach				supplier	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high me	1.912	mg	955045	5386
Bonding wire	Other inorganic materials	0.969	mg	supplier	wire	Aluminium(Al)	84195-93-7		0.969	mg	1000000	2730
Encapsulation	Other Organic Materials	145.796	mg	supplier	mold compound	Silica Fused	60676-86-0		106.986	mg	733806	301369
Encapsulation				supplier	mold compound	Silica amorphous	7631-86-9		14.645	mg	100449	41254
Encapsulation				supplier	mold compound	Epoxy resin	proprietary		14.645	mg	100449	41254
Encapsulation				supplier	mold compound	Phenolic resin	proprietary		8.787	mg	60269	24752
Encapsulation				supplier	mold compound	Carbon Black	1333-86-4		0.733	mg	5028	2065
Finishing	Solder	3.062	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		3.062	mg	1000000	8614