



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 *	2017-11-27
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Floriana SAN BIAGIO	Representative Title	AMG 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 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
	KUQ7*MT64ABA	A	Z7GA	2017-11-27
Amount	UoM	Unit type	ST ECOPACK Grade	
150.00	mg	Each	ECOPACK® 2	

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	
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DSO	3.9x9.9x1.25	16	gull wing	
Comment	Package: Q7 SO 16 .15 TO JEDEC MS-012; MDF valid for HVLED815PFTR			

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	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
Exemption Id.	Description

QueryList : REACH-7th July 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						Mfr Item Name	KUQ2*MT64ABA									
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	5.652	mg	supplier	die	Silicon (Si)	7440-21-3		5.455	mg	965145	36367				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.067	mg	11854	447				
				supplier	metallization	Tungsten (W)	7440-33-7		0.009	mg	1592	60				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.021	mg	3715	140				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.049	mg	8669	327				
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.002	mg	354	13				
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.027	mg	4777	180				
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.010	mg	1769	67				
				supplier	polymer die coating	PIX1 Gamima-butylolactone	96-48-0		0.012	mg	2123	80				
				Leadframe	Copper & its alloys	31.192	mg	supplier	alloy	Copper (Cu)	7440-50-8		30.274	mg	970569	201827
supplier	alloy	Iron (Fe)	7439-89-6						0.712	mg	22826	4747				
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.043	mg	1379	287				
supplier	alloy	Zinc (Zn)	7440-66-6						0.038	mg	1218	253				
supplier	metallization	Nickel (Ni)	7440-02-0						0.113	mg	3623	753				
supplier	metallization	Palladium (Pd)	7440-05-3						0.004	mg	128	27				
supplier	metallization	Gold (Au)	7440-57-5						0.004	mg	128	27				
supplier	metallization	Silver (Ag)	7440-22-4						0.004	mg	128	27				
Die attach	Other Organic Materials	0.561	mg					supplier	glue	Silver (Ag)	7440-22-4		0.458	mg	816399	3053
								supplier	glue	Acrylate resins	7534-94-3		0.068	mg	121212	453
				supplier	glue	Heterocyclic organic compound	3006-93-7		0.016	mg	28520	107				
				supplier	glue	Fluoroaliphatic Polymeric Esters	1017237-78-3		0.003	mg	5348	20				
				supplier	glue	Treated silica	Proprietary		0.016	mg	28520	107				
				supplier	wire	Gold (Au)	7440-57-5		0.206	mg	1000000	1373				
Bonding wires	Other inorganic materials	0.206	mg	supplier	wire	Gold (Au)	7440-57-5		0.206	mg	1000000	1373				
				supplier	mold compound	Silica, vitreous	85954-11-6		99.688	mg	886991	664587				
Encapsulation	Other Organic Materials	112.389	mg	supplier	mold compound	epoxy resin	25068-38-6		8.992	mg	80008	59947				
				supplier	mold compound	Phenol resin	26834-02-6		3.372	mg	30003	22480				
				supplier	mold compound	carbon black	1333-86-4		0.337	mg	2999	2247				