



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 *	2019-04-15
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 *	Antonella Lanzafame	Representative Title	AMS 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/support.html		

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
	9F8W*L264EA6	A	Z8GA	2019-04-15
Amount	UoM	Unit type	ST ECOPACK Grade	
480.00	mg	Each	ECOPACK® 2	

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

Package Designator	Size	Nbr of instances	Shape	
DIP	9.05X6.4X3.32	10	Through-hole	
Comment	PDIP 08 .3 CU .25 Au W., MD valid for CP:UC3842BN.			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 2015	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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)	false
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

QueryList : California Prop65 list, dated 23rd November 2018				
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	9FSW*L264EAG						
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 Material	3.131	mg	Supplier	Silicon die	Silicon (Si)	7440-21-3		3.038	mg	970297	6329	
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.038	mg	12137	79	
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.013	mg	4152	27	
Silicon Die				supplier	passivation	Silicon Oxide	7631-86-9		0.019	mg	6068	40	
Silicon Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.002	mg	639	4	
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.021	mg	6707	44	
Leadframe	Copper and its alloy	184.702	mg	Supplier	Alloy	Copper(CU)	7440-50-8		179.308	mg	970796	373558	
Leadframe				Supplier	Alloy	Fe	7439-89-6		3.864	mg	20920	8050	
Leadframe				Supplier	Alloy	Iron Phosphide (Fe2P)	1310-43-6		0.028	mg	152	58	
Leadframe				Supplier	Alloy	Zn	7440-66-6		0.093	mg	504	194	
Leadframe				Supplier	Alloy	Silver(Ag)	7440-22-4		1.409	mg	7629	2935	
Die Attach	Other Organic Material	0.571	mg	Supplier	Epoxy	Silver(Ag)	7440-22-4		0.408	mg	714536	850	
Die Attach				Supplier	Epoxy	Epoxy Resin	25068-38-6		0.086	mg	150613	179	
Die Attach				Supplier	Epoxy	2,6-Diglycidyl phenyl allyl ether	EC 417-470-1		0.043	mg	75306	90	
Die Attach				Supplier	Epoxy	Epoxy resin modifier	Proprietary		0.017	mg	29772	35	
Die Attach				Supplier	Epoxy	Amine	Proprietary		0.017	mg	29772	35	
Bonding wire	Other Inorganic Material	0.081	mg	Supplier	Bonding wire	Copper(CU)	7440-50-8		0.081	mg	1000000	169	
Encapsulation	Other Organic Material	289.089	mg	Supplier	Molding compound	Silica Fused	60676-86-0		231.273	mg	800006	481819	
Encapsulation				Supplier	Molding compound	Epoxy Resin	Proprietary		28.908	mg	99997	60225	
Encapsulation				Supplier	Molding compound	Phenol Resin	Proprietary		18.79	mg	64997	39146	
Encapsulation				Supplier	Molding compound	Carbon Black	1333-86-4		10.118	mg	35000	21079	
Finishing	Other Inorganic Material	2.426	mg	Supplier	Connection Coating	Tin(Sn)	7440-31-5		2.426	mg	1000000	5054	