




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 *	19-10-2017
Company Unique ID	NL 008751171B01		
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG 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	
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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
ST25DV04K-IER6C3	CGZW*DV2D1UA	A	P1C7	19-10-2017
	Amount	UoM	Unit type	ST ECOPACK Grade
	16.00	mg	Each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

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

Package Designator	Size	Nbr of instances	Shape	
QFN	2x3x0.6	8	No lead	
Comment	Package : ZW UDFPN 2x3x0.6 8L 0.5MM PITCH 7558452			

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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	CGZW*DV2D1UA				7000001.0	999940.0
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	M-011 Other inorganic materials	1.228	mg	supplier	die	Silicon (Si)	7440-21-3		1.164	mg	947883	72750
				supplier	metallization	Aluminium (Al)	7429-90-5		0.006	mg	4886	375
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	814	63
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	814	63
				supplier	Passivation	Silicon Nitride	12033-89-5		0.004	mg	3257	250
Lead-frame	M-011 Other inorganic materials	2.994	mg	supplier	Passivation	Silicon Oxide	7631-86-9		0.052	mg	42345	3250
				supplier	alloy	Copper (Cu)	7440-50-8		2.918	mg	974500	182353
				supplier	alloy	Iron (Fe)	7439-89-6		0.070	mg	23460	4390
				supplier	alloy	Zinc (Zn)	7440-66-6		0.004	mg	1200	225
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.003	mg	840	157
Lead-frame Coating	M-011 Other inorganic materials	0.013	mg	supplier	coating	Nickel (Ni)	7440-02-0		0.012	mg	916800	748
				supplier	coating	Palladium (Pd)	7440-05-3		0.001	mg	58700	48
				supplier	coating	Gold (Au)	7440-57-5		0.000	mg	24500	20
Die Attach	M-011 Other inorganic materials	1.266	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		1.108	mg	875000	69248
				supplier	glue or soft solder	polymer	28630-26-4		0.101	mg	80000	6331
				supplier	glue or soft solder	aniline	67784-74-1		0.013	mg	10000	791
				supplier	glue or soft solder	epoxy resin	Proprietary		0.038	mg	30000	2374
				supplier	glue or soft solder	Epoxy resin molecular weight <= 700	Proprietary		0.006	mg	5000	396
Wires	M-011 Other inorganic materials	0.018	mg	supplier	Bonding wire	Copper (Cu)	7440-50-8		0.018	mg	1000000	1129
Encapsulation	M-011 Other inorganic materials	10.480	mg	supplier	Moulding Compound	silica vitreous	60676-86-0		9.229	mg	880620	576781
				supplier	Moulding Compound	Biphenyl epoxy resin	85954-11-6		0.521	mg	49742	32580
				supplier	Moulding Compound	Phenolic resin	205830-20-2		0.407	mg	38799	25412
				supplier	Moulding Compound	Epoxy resin	Proprietary		0.209	mg	19897	13032
				supplier	Moulding Compound	carbon black	1333-86-4		0.021	mg	1990	1303
Finishing	M-011 Other inorganic materials	0.000	mg	supplier	Moulding Compound	other	Proprietary		0.094	mg	8954	5864
				supplier	connections coating	Nickel (Ni)	7440-02-0		0.000	mg	916800	7
				supplier	connections coating	Palladium (Pd)	7440-05-3		0.000	mg	58700	0
				supplier	connections coating	Gold (Au)	7440-57-5		0.000	mg	24500	0