



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 *	17/03/2016
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Giovanni Giacopello	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

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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
LDK130PU33R	MQBF*V798AB5	A	Z6HA	17/03/2016
Amount	UoM	Unit type	ST ECOPACK Grade	
1.94	mg	Each	ECOPACK® 2	

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	1.2X1.3X0.45	6	No lead	
Comment	Package: VFDFPN 6L 1.2X1.3X0.45 0.4 P (MD valid for LDK120PU33R, LDK130PU33R).			

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-15th June 2015				
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	MQBF*V798A85					
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	0.154	mg	supplier	die	Silicon (Si)	7440-21-3		0.135	mg	876623	69588
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	25974	2062
				supplier	metallization	Tungsten (W)	7440-33-7		0.003	mg	19481	1546
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	6494	515
				supplier	Passivation	Silicon Oxide	7631-86-9		0.007	mg	45455	3608
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.004	mg	25974	2062
Leadframe	Copper and its alloy	0.462	mg	supplier	Alloy	Iron (Fe)	7439-89-6		0.001	mg	2164	515
				supplier	Alloy	Magnesium (Mg)	7439-95-4		0.001	mg	2164	515
				supplier	Alloy	Zinc (Zn)	7440-66-6		0.005	mg	10821	2577
				supplier	Alloy	Manganese (Mn)	7439-96-5		0.001	mg	1082	258
				supplier	Alloy	Copper (Cu)	7440-50-8		0.440	mg	952278	226804
				supplier	metallization	Nickel (Ni)	7440-02-0		0.014	mg	30300	7216
				supplier	metallization	Palladium (Pd)	7440-05-3		0.001	mg	1082	258
				supplier	metallization	Gold (Au)	7440-57-5		0.000	mg	108	26
Die attach	Other organic materials	0.031	mg	supplier	Epoxy	Epoxyde Bisphenol A Resin	25068-38-6		0.003	mg	96339	1546
				supplier	Epoxy	Diaminodiphenylsulfone	80-08-0		0.001	mg	32113	515
				supplier	Epoxy	Ethoxyethoxy-ethyl Acetate	112-15-2		0.007	mg	224791	3608
				supplier	Epoxy	Bisphenol A diglycidyl ether polymer	25036-25-3		0.004	mg	128452	2062
				supplier	Epoxy	Glycol ether ester	Proprietary		0.001	mg	32113	515
				supplier	Epoxy	Silica, vitreous	60676-86-0		0.009	mg	289017	4639
Bonding wire	Other inorganic materials	0.019	mg	supplier	Epoxy	Aluminium oxide	1344-28-1		0.006	mg	192678	3093
				supplier	Epoxy	Aminopropyltriethoxysilane	919-30-2		0.000	mg	4496	72
				supplier	Bonding Wire	Gold (Au)	7440-57-5		0.019	mg	1000000	9794
Encapsulation	Other organic materials	1.274	mg	supplier	molding compound	Silica, vitreous	60676-86-0		1.180	mg	926217	608247
				supplier	molding compound	epoxy resin	85954-11-6		0.051	mg	40031	26289
				supplier	molding compound	phenol resin	26834-02-6		0.038	mg	29827	19588
				supplier	molding compound	carbon black	1333-86-4		0.005	mg	3925	2577