



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D

*\* : Required Field*

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	20/11/2014
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Yves HALLEZ	<b>Representative Title</b>	Imaging Group MD CHAMPION
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**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**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	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
VL6180V1NR/1	CRNR*180QDAQ	A	SH1A	20/11/2014
Amount	UoM	Unit type	ST ECOPACK Grade	
21.0	mg	Each	ECOPACK® 2	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
3	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Nickel/Gold (Ni/Au)	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape
LGA	4.8 x 2.8 x 1mm	12	flat
Comment			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	<b>true</b>
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 :REACH-20th June 2013			
Query			Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH			<b>true</b>
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application
			ppm in product

Material Composition Declaration						Mfr Item Name	CRNR*180QDAQ					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die 1	Other inorganic materials	1.508	mg	supplier	die	Silicon (Si)	7440-21-3		1.440	mg	954907	68571
Die 1				supplier	metallisation	Aluminium (Al)	7429-90-5		0.006	mg	3979	286
Die 1				supplier	metallisation	Copper (Cu)	7440-50-8		0.017	mg	11273	810
Die 1				supplier	metallisation	Tantalum (Ta)	7440-25-7		0.006	mg	3979	286
Die 1				supplier	metallisation	Titanium (Ti)	7440-32-6		0.002	mg	1326	95
Die 1				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.010	mg	6631	476
Die 1				supplier	passivation	Silicon Oxide	7631-86-9		0.019	mg	12599	905
Die 1				supplier	die polymer coating	Polymer resist (color, planar,µlens)	Proprietary		0.008	mg	5305	381
die2	Other inorganic materials	0.015	mg	supplier	diode	Gallium Arsenide (AsGa)	1303-00-0		0.014	mg	933333	667
die2				supplier	metallisation	Gold (Au)	7440-57-5		0.001	mg	66667	48
substrate	Other Organic Materials	9.727	mg	supplier	core material	Fiber glass	65997-17-3		2.720	mg	279634	129524
substrate				supplier	core material	Bisphenol F type epoxy resin	9003-36-5		1.515	mg	155752	72143
substrate				supplier	core material	metal hydroxide	21645-51-2		0.062	mg	6374	2952
substrate				supplier	core material	Zinc hydroxide	20427-58-1		0.012	mg	1234	571
substrate				supplier	core material	Calcium sulfate	7778-18-9		0.031	mg	3187	1476
substrate				supplier	core material	Bismaleimide (B)	105391-33-1		0.921	mg	94685	43857
substrate				supplier	core material	Triazine (T)	25722-66-1		0.921	mg	94685	43857
substrate				supplier	Solder mask	Barium sulfate	7727-43-7		0.146	mg	15010	6952
substrate				supplier	Solder mask	(2-methoxymethylethoxy)propanol	34590-94-8		0.024	mg	2467	1143
substrate				supplier	Solder mask	Talc containing no asbestiform fibers	14807-96-6		0.081	mg	8327	3857
substrate				supplier	Solder mask	Quartz	14808-60-7		0.081	mg	8327	3857
substrate				supplier	Solder mask	Acrylic resin	9003-01-4		0.336	mg	34543	16000
substrate				supplier	Solder mask	Epoxy resin	29690-82-2		0.110	mg	11309	5238
substrate				supplier	Solder mask	aromatic hydrocarbon	Proprietary		0.032	mg	3290	1524
substrate				supplier	metallisation	Copper (Cu)	7440-50-8		2.616	mg	268942	124571
substrate				supplier	metallisation	Nickel (Ni)	7440-02-0		0.105	mg	10795	5000
substrate				supplier	metallisation	Gold (Au)	7440-57-5		0.014	mg	1439	667
Die attach	Other Organic Materials	0.249	mg	supplier	glue	Acrylic resin	9003-01-4		0.157	mg	630522	7476
Die attach				supplier	glue	epoxy resin	Proprietary		0.092	mg	369478	4381
Die attach 2	Other Organic Materials	0.014	mg	supplier	glue	Silver (Ag)	7440-22-4		0.010	mg	714286	476
Die attach 2				supplier	glue	2,6-Diglycidylphenyl allyl ether	13561-08-5		0.002	mg	142857	95
Die attach 2				supplier	glue	1,4-bis (2,3-epoxypropoxy) butane	2425-79-8		0.001	mg	71429	48
Die attach 2				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.001	mg	71429	48
Bonding wire	Precious metals	0.038	mg	supplier	wire	Gold (Au)	7440-57-5		0.038	mg	1000000	1810
IR Glass	Other inorganic materials	0.84	mg	supplier	glass	Inorganic glass	65997-17-3		0.835	mg	994843	39765
IR Glass				supplier	glass	SiO2	7631-86-9		0.002	mg	2429	97
IR Glass				supplier	IR filter	Ti3O5	12065-65-5		0.002	mg	2429	97
Lens	Other Organic Materials	6.85	mg	supplier	Mount	Polynonamethylene terephthalamide	169284-22-4		4.316	mg	630000	205500
Lens				supplier	Mount	Calcium silicate	13983-17-0		2.329	mg	340000	110905
Lens				supplier	Mount	Additif	Proprietary		0.069	mg	10000	3262
Lens				supplier	Lens	Thermoplastic Polyimide (TPI) resin	Proprietary		0.137	mg	20000	6524
IRGA glue	Other Organic Materials	0.56	mg	supplier	glue	Cycloaliphatic epoxy resin	2386-87-0		0.280	mg	500000	13333
IRGA glue				supplier	glue	Other	Proprietary		0.280	mg	500000	13333
Lens attach glue	Other Organic Materials	1.2	mg	supplier	glue	2,2'-(methylenebis(phenyleneoxy)methylene))bis	39817-09-9		0.360	mg	300000	17143
Lens attach glue				supplier	glue	1,4-bis(2,3-epoxypropoxy)butane	2425-79-8		0.144	mg	120000	6857
Lens attach glue				supplier	glue	Epoxy resin	68475-94-5		0.036	mg	30000	1714
Lens attach glue				supplier	glue	Imidazole derivative	Proprietary		0.036	mg	30000	1714
Lens attach glue				supplier	glue	Carbon Black	1333-86-4		0.012	mg	10000	571
Lens attach glue				supplier	glue	Silica, vitreous	60676-86-0		0.276	mg	230000	13143
Lens attach glue				supplier	glue	Tetrafluoroethylene	9002-84-0		0.300	mg	250000	14286
Lens attach glue				supplier	glue	Polyoxypropylenediamine	9046-10-0		0.036	mg	30000	1714