Materials Declaration Form

IPC	**1752**	**Version**	**2**
Form Type *	Distribute		
Sectionals *	Material Info	**Subsectionals ***	A-D
	Manufacturing Info		***** : Required Field***

Supplier Information			
Company Name *	**STMicroelectronics**	**Response Date ***	**2015-10-21**
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**	**IPD 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/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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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 omprehensive 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.

Signature Not
Verified

Digitally signed by
Antonella Lanzafame
Date: 2015.10.27
11:27:39 +01:00

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
LD1085D2M-R	HZDO*LUADFC2	A	SH1A	2015-10-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	1380.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
1	245	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable ; if coating is used o	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SIP	10.20,9.15,4.5	2	gull wing	
Comment	Package: D2PAK SMD 3 LEADS,MD valid for CP:LD1085D2M-R.			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	**Response**
Product(s) meets EU RoHS requirement without any exemptions	false
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)	**true**
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**
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

QueryList : REACH-15th June 2015	
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**	**HZDO*LUADFC2**					
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
die (s)	Other inorganic materials	6.568	mg	supplier	die	Silicon (Si)	7440-21-3		6.449	mg	981882	4673
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.06	mg	9135	43
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.005	mg	761	4
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.021	mg	3197	15
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.029	mg	4415	21
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.001	mg	152	1
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.003	mg	457	2
Leadframe	Copper & its alloys	778.993	mg	supplier	alloy	Copper (Cu)	7440-50-8		776.964	mg	997395	563017
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		0.358	mg	460	259
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.653	mg	838	473
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		1.012	mg	1299	733
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0.006	mg	8	4
Soft solder	Solder	4.99	mg	JIG R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	4.765	mg	954910	3453
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.125	mg	25050	91
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		0.1	mg	20040	72
Bonding wire	Other inorganic materials	0.402	mg	supplier	wire	Copper (Cu)	7440-50-8		0.402	mg	1000000	291
encapsulation	Other Organic Materials	586.558	mg	supplier	mold compound	Epoxy Resin	Proprietary		17.597	mg	30000	12751
encapsulation				supplier	mold compound	2,2'-((3,3',5,5'-tetramethyl-(1,1'-biphenyl)-4,4'	EC 413-900-7		23.462	mg	39999	17001
encapsulation				supplier	mold compound	phenol resin	Proprietary		29.328	mg	50000	21252
encapsulation				supplier	mold compound	Silica, vitreous	60676-86-0		513.238	mg	875000	371912
encapsulation				supplier	mold compound	Carbon black	1333-86-4		2.933	mg	5000	2125
connections coating	Solder	2.489	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		2.489	mg	1000000	1804