



## 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  <i>* : Required Field</i>

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-06-15
<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>	Giovanni Giacobello	<b>Representative Title</b>	IPD Materials Declaration 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
	TDTY*EVF5T5S	A	Z4LA	2015-06-15
Amount	UoM	Unit type	ST ECOPACK Grade	
5380.00	mg	Each	ECOPACK® 1	

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	260	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	
SIP	15.75 - 20.15 - 5.15	3	Through-hole	
Comment	Package: TO3P-3L; MDF valid for STGWT30V60DF			

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-17th December 2014				
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	TDY*EVF5T55					
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 materials	3.183	mg	supplier	die	Silicon (Si)	7440-21-3		2.635	mg	827835	490
Silicon Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.209	mg	65661	39
Silicon Die				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.05	mg	15708	9
Silicon Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.073	mg	22934	14
Silicon Die				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.005	mg	1571	1
Silicon Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.062	mg	19478	12
Silicon Die				supplier	back side metallization	Vanadium (V)	7440-62-2		0.005	mg	1571	1
Silicon Die				supplier	back side metallization	Silver (Ag)	7440-22-4		0.025	mg	7854	5
Silicon Die				supplier	polymer die coating	Durimide	proprietary		0.119	mg	37386	22
Lead-frame	Other inorganic materials	3414.786	mg	supplier	Alloy	Copper (Cu)	7440-50-8		3396.687	mg	994700	631354
Lead-frame				supplier	Alloy	Iron (Fe)	7439-89-6		3.415	mg	1000	635
Lead-frame				supplier	Alloy	Phosphorus (P)	12185-10-3		13.659	mg	4000	2539
Lead-frame				supplier	Alloy	Nickel (Ni)	7440-02-0		1.025	mg	300	191
Soft solder	Solder	54.179	mg	supplier	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	50.657	mg	934993	9416
Soft solder				supplier	solder	Tin (Sn)	7440-31-5		2.709	mg	50001	504
Soft solder				supplier	solder	Silver (Ag)	7440-22-4		0.813	mg	15006	151
Bonding wire	Other inorganic materials	5.468	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.468	mg	1000000	1016
encapsulation	Other inorganic materials	1888.333	mg	supplier	mold compound	Silica vitreous	60676-86-0		1472.899	mg	780000	273773
encapsulation				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		179.392	mg	95000	33344
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		169.95	mg	90000	31589
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		32.102	mg	17000	5967
encapsulation				supplier	mold compound	Brominated flame retardant	Proprietary		28.325	mg	15000	5265
encapsulation				supplier	mold compound	Carbon Black	1333-86-4		5.665	mg	3000	1053
connections coating	Solder	14.051	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		14.051	mg	1000000	2612