



## 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>

<b>Supplier Information</b>			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2016-10-27
<b>Contact Name *</b>	Refer to Supplier Comment section		Refer to Supplier Comment section
<b>Authorized Representative *</b>	Giovanni Giacopello	<b>Representative Title</b>	ADG 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/support.html">http://www.st.com/web/en/support/support.html</a>		

**Uncertainty Statement**


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<b>Legal Statement</b>			
<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 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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STGWT40H65DFB	TDY*EWF6T5S	A	Z8GA	2016-10-27
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
Not Applicable	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	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			

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	false
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)	true
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
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

Query : California Prop65 list, dated 21st October 2016			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	1.11	Die / Leadframe	206
Lead	50.65	Soft solder	9414
Antimony Trioxide	32.10	Encapsulation	5966

QueryList : REACH-12th January 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						Mfr Item Name	TDY*EW6TSS					
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	4.127	mg	supplier	die	Silicon (Si)	7440-21-3		3.549	mg	859947	660
				supplier	metallization	Aluminium (Al)	7429-90-5		0.282	mg	68331	52
				supplier	Passivation	Silicon Nitride	12033-89-5		0.067	mg	16235	12
				supplier	Passivation	Silicon Oxide	7631-86-9		0.098	mg	23746	18
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.007	mg	1696	1
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.084	mg	20354	16
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.006	mg	1454	1
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.034	mg	8238	6
Leadframe	Other inorganic materials	3414.186	mg	supplier	Alloy	Copper (Cu)	7440-50-8		3396.091	mg	994700	631244
				supplier	Alloy	Iron (Fe)	7439-89-6		3.415	mg	1000	635
				supplier	Alloy	Phosphorus (P)	12185-10-3		13.656	mg	4000	2538
				supplier	Alloy	Nickel (Ni)	7440-02-0		1.024	mg	300	190
				supplier	Alloy	Lead (Pb)	7439-92-1	7a-Lead in high mel	50.648	mg	935000	9414
Soft solder	Solder	54.169	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high mel	50.648	mg	935000	9414
				supplier	solder	Tin (Sn)	7440-31-5		2.709	mg	50010	504
				supplier	solder	Silver (Ag)	7440-22-4		0.812	mg	14990	151
Bonding wire	Other inorganic materials	5.467	mg	supplier	wire	Aluminium (Al)	7429-90-5		5.467	mg	1000000	1016
Encapsulation	Other inorganic materials	1888.003	mg	supplier	mold compound	Silica vitreous	60676-86-0		1472.641	mg	779999	273725
				supplier	mold compound	Bisphenol F type epoxy resin	9003-36-5		179.362	mg	95001	33339
				supplier	mold compound	Phenol resin	9003-35-4		169.920	mg	90000	31584
				supplier	mold compound	Antimony Trioxide	1309-64-4		32.096	mg	17000	5966
				supplier	mold compound	Brominated flame retardant	Proprietary		28.320	mg	15000	5264
				supplier	mold compound	Carbon Black	1333-86-4		5.664	mg	3000	1053
Connections coating	Solder	14.048	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		14.048	mg	1000000	2611