



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 *	2017-06-21
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Antonella Lanzafame	Representative Title	AMG 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

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
TS4061AILT-1.25	HVWX*V847AAJ	A	ZS1A	2017-06-21
Amount	UoM	Unit type	ST ECOPACK Grade	
10.00	mg	Each	ECOPACK® 2	
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant		

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	
Not Applicable ; if coating is used or other bulk termination : add in	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SOT	2.8x1.5x0.9	3	gull wing	
Comment	Package: WX SOT 23 3 LDS; MDF valid for TS4061AILT-1.225			

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	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
Exemption Id.	Description

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	HVWX*V847AAJ					
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	0.321	mg	supplier	die	Silicon (Si)	7440-21-3		0.302	mg	940810	30200
				supplier	metallization	Aluminium (Al)	7429-90-5		0.004	mg	12461	400
				supplier	metallization	Titanium (Ti)	7440-32-6		0.001	mg	3115	100
				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	12461	400
				supplier	Passivation	Silicon Nitride	12033-89-5		0.001	mg	3115	100
				supplier	Passivation	Silicon Oxide	7631-86-9		0.009	mg	28037	900
Leadframe	Copper & its alloys	2.266	mg	supplier	alloy	Copper (Cu)	7440-50-8		2.188	mg	965578	218800
				supplier	alloy	Iron (Fe)	7439-89-6		0.051	mg	22507	5100
				supplier	alloy	Phosphorus (P)	12185-10-3		0.001	mg	441	100
				supplier	alloy	Zinc (Zn)	7440-66-6		0.003	mg	1324	300
				supplier	metallization	Silver (Ag)	7440-22-4		0.023	mg	10150	2300
Die attach	Other Organic Materials	0.029	mg	supplier	glue	Silver (Ag)	7440-22-4		0.023	mg	793103	2300
				supplier	glue	Carbocyclic Acrylates	proprietary		0.003	mg	103448	300
				supplier	glue	Bismaleimide resin	35325-39-4		0.001	mg	34483	100
				supplier	glue	2-preponoic acid, 2-methyl	68586-19-6		0.001	mg	34483	100
				supplier	glue	Additive	proprietary		0.001	mg	34483	100
Bonding wires	Other inorganic materials	0.029	mg	supplier	wire	Copper (Cu)	7440-50-8		0.028	mg	965517	2800
				supplier	wire	Palladium (Pd)	7440-05-3		0.001	mg	34483	100
Encapsulation	Other Organic Materials	7.162	mg	supplier	mold compound	Epoxy Resin-1	Proprietary		0.215	mg	30020	21500
				supplier	mold compound	Epoxy Resin-2	25068-38-6		0.215	mg	30020	21500
				supplier	mold compound	Phenol resin	29690-82-2		0.322	mg	44960	32200
				supplier	mold compound	Silica	60676-86-0		6.396	mg	893047	639600
				supplier	mold compound	Carbon Black	1333-86-4		0.014	mg	1955	1400
Finishing	Other inorganic materials	0.193	mg	supplier	Connection coating	Tin (Sn)	7440-31-5		0.193	mg	1000000	19300