

## **Materials Declaration Form**

IPC	1752				
	Distribute	Version	2		
Form Type *	Material Info	Culture attended *	A-D		
Sectionals *		Subsectionals			
	Manufacturing Info		* : Required Field		
Supplier Information					
Company Name *	STMicroelectronics Response Date * 2016-11-11				
Contact Name *	Refer to Supplier Comment section	· ·	Refer to Supplier Comment section		
Authorized Representative *	Floriana San Biagio	Representative Title	AMG MD CHAMPION		
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section		
Supplier Comment	Online Technical Support - STMicroele http://www.st.com/web/en/support/				
basis. STMicroelectronics disclaims a truth, accuracy, merchantability, fitne kind which could arise, directly or ind	Il warranties, express or implied relate	ed to this document and its contents, in fringement. ST shall have no responsib	and its contents are provided on a strict 'as is' and 'as available' ncluding but not limited to implied warranties of completeness, illity and assumes no liability for any cost, loss or damage of any		
Legal Statement					
Supplier Acceptance *	true	Legal Declaration *	Standard		
			nformation is true and correct to the best of its knowledge and es that Company will rely on this certification in determining the		

Product								
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date 2016-11-11				
	DZWB*D6BALZB	А	ZS1A					
	Amount	UoM	Unit type	ST ECOPACK Grade				
	16.78	mg	Each	ECOPACK <sup>®</sup> 3				
,		ECOPACK® 3 is STMicroelectronics trade name for ROHS compliant device without use of any ROHS exmeption and without Halogen nor Antimony						

Manufacturing information								
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles						
1	260	3						
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented				
NAC	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy		moradginomod				

Package Designator	Size	Nbr of instances	Shape	
DSO	2.9x1.625x1.175	6	gull wing	
Comment	Package: WB SOT 23 - 6L; MDF valid fo	r STM6710LWB6F		

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015						
Query						
1 - Product(s) meets EU RoHS requirement without any exemptions						
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)						
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)						
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions						
Exemption Id. Description						

QueryList : REACH-20th June 2016								
Query								
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH								
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product				

Material Composition Declaration					Mfr Item Name	DZWB*	D6BALZB					
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	0.928	mg	supplier	die	Silicon (Si)	7440-21-3		0.903	mg	973060	53814
				supplier	metallization	Aluminium (Al)	7429-90-5		0.005	mg	5388	298
				supplier	metallization	Titanium (Ti)	7440-32-6		0.002	mg	2155	119
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	1078	60
				supplier	passivation	Silicon Nitride (SiN)	12033-89-5		0.003	mg	3233	179
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.014	mg	15086	834
Leadframe	Other inorganic materials	7.960	mg	supplier	alloy	Copper (Cu)	7440-50-8		7.704	mg	967839	459118
				supplier	alloy	Iron (Fe)	7439-89-6		0.195	mg	24497	11621
				supplier	alloy	Phosphorus (P)	12185-10-3		0.002	mg	251	119
				supplier	alloy	Zinc (Zn)	7440-66-6		0.009	mg	1131	536
	Nickel (Ni)			supplier	metallization	Nickel (Ni)	7440-02-0		0.046	mg	5779	2741
	Precious metals			supplier	metallization	Palladium (Pd)	7440-05-3		0.003	mg	377	179
	Precious metals			supplier	metallization	Gold (Au)	7440-57-5		0.001	mg	126	60
Die Attach	Other Organic Materials	0.078	mg	supplier	glue	Epoxyde Bisphenol A Resin	25068-38-6		0.022	mg	282051	1311
				supplier	glue	Aromatic amine	Proprietary		0.003	mg	38462	179
				supplier	glue	Glycol ether ester	Proprietary		0.003	mg	38462	179
				supplier	glue	silica	60676-86-0		0.024	mg	307692	1430
				supplier	glue	Aluminium oxide	1344-28-1		0.026	mg	333333	1549
Bonding wire	Precious metals	0.139	mg	supplier	wire	Gold (Au)	7440-57-5		0.139	mg	1000000	8284
encapsulation	Other Organic Materials	7.675	mg	supplier	mold compound	Silica, vitreous	60676-86-0		6.705	mg	873616	399583
				supplier	mold compound	phenolic resin	Proprietary		0.375	mg	48860	22348
				supplier	mold compound	epoxy resin	Proprietary		0.364	mg	47427	21692
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		0.208	mg	27101	12396
				supplier	mold compound	carbon black	1333-86-4		0.016	mg	2085	954