


Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STL210N4LF7AG	BSY5*OL4FQ82	A	SH1A	2019-03-22
	Amount	UoM	Unit type	ST ECOPACK Grade
	95	mg	Each	ECOPACK® 2

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	
Not Applicable	Tin (Sn), matte	Copper Alloy		



Package Designator	Size	Nbr of instances	Shape	
QFN	6, 5, 1	8	flat	
Comment	PowerFLAT 5x6 WF			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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5 - Product(s) is obsolete, no information is available	FALSE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)

QueryList : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	FALSE
2 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	TRUE
Exemption Id.	Description
8e	Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)

QueryList : California Prop65 list, dated 23rd November 2018			
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	0.07	Die	695
Lead	11.88	Soft solder	125011

QueryList : REACH-15th January 2019				
Query				Response
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product
Lead	1000 ppm	11.88	Soft solder	125011
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Embedded article nor Homogeneous Material above the limits per the definition within REACH				FALSE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material
Lead	1000 ppm	11.88	Soft solder	925282

Material Composition Declaration :						Mfr Item Name	BSY5*OL4FQ82					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	1.926	mg	supplier	die	Silicon (Si)	7440-21-3		1.662	mg	862928	17495
				supplier	metallization	Aluminium (Al)	7429-90-5		0.110	mg	57113	1158
				supplier	metallization	Nickel (Ni)	7440-02-0		0.027	mg	14019	284
				supplier	metallization	Silver (Ag)	7440-22-4		0.016	mg	8307	168
				supplier	metallization	Titanium (Ti)	7440-32-6		0.012	mg	6231	126
				supplier	Passivation	Silicon Nitride	12033-89-5		0.011	mg	5711	116
				supplier	Passivation	Silicon Oxide	7631-86-9		0.027	mg	14019	284
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.003	mg	1558	32
				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.039	mg	20249	411
				supplier	back side metallization	Vanadium (V)	7440-62-2		0.003	mg	1558	32
				supplier	back side metallization	Silver (Ag)	7440-22-4		0.016	mg	8307	168
				Leadframe	M-004 Copper and its alloys	40.132	mg	supplier	alloy	Copper (Cu)	7440-50-8	
supplier	alloy	Iron (Fe)	7439-89-6						0.913	mg	22750	9611
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.055	mg	1370	579
supplier	alloy	Zinc (Zn)	7440-66-6						0.048	mg	1196	505
supplier	metallization	Silver (Ag)	7440-22-4						0.307	mg	7650	3232
Soft solder	Solder	12.835	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	11.876	mg	925282	125011
				supplier	solder	Silver (Ag)	7440-22-4		0.320	mg	24932	3368
				supplier	solder	Tin (Sn)	7440-31-5		0.639	mg	49786	6726
Bonding wires	M-011 Other inorganic materials	0.058	mg	supplier	wire	Gold (Au)	7440-57-5		0.058	mg	1000000	611
Encapsulation	M-011 Other inorganic materials	32.088	mg	supplier	mold compound	Silica, vitreous	60676-86-0		25.189	mg	784998	265147
				supplier	mold compound	epoxy resin	25068-38-6		4.171	mg	129986	43905
				supplier	mold compound	phenol resin	9003-35-4		1.925	mg	59991	20263
				supplier	mold compound	metal hydroxide	21645-51-2		0.642	mg	20008	6757
				supplier	mold compound	Carbon black	1333-86-4		0.161	mg	5017	1695
Connections coating	Solder	0.156	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		0.156	mg	1000000	1642
Clip	M-011 Other inorganic materials	7.805	mg	supplier	clip	Copper (Cu)	7440-50-8		7.805	mg	1000000	82158