

# Materials Composition Declaration

Substance present with less 0.001mg will not be declared in this document

Part Number	Package description	Product weight (mg)	Moisture Sensitivity Level (J-STD-020)	Environmental Compliance Info
BOS1901CQ	QFN 24L 4.0mm x 4.0mm	38,472	3	<i>Quality – Boréas Technologies (boreas.ca)</i>

Homogeneous material	Substance (Mfr Item Name)	CAS	Material group	Mass (mg)	Concentration in homogeneous material		Concentration in product	
					(%)	(ppm)	(%)	(ppm)
Die	Silicon(Si)	7440-21-3	Other inorganic materials	1,987	98%	982602	5%	51651
	Aluminium(Al)	7429-90-5	Non-ferrous metals and alloys	0,018	1%	8736	0%	459
	Phosphorus(P)	7723-14-0	Other inorganic materials	0,001	0%	531	0%	28
	Titanium(Ti)	7440-32-6	Non-ferrous metals and alloys	0,006	0%	2739	0%	144
	Tungsten(W)	7440-33-7	Other precious metals	0,011	1%	5392	0%	283
subtotal				2,022	100%	1000000	5%	52565
Leadframe	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	17,186	96%	960998	45%	446703
	Iron(Fe)	7439-89-6	Steels and ferrous materials	0,402	2%	22501	1%	10459
	Phosphorus(P)	7723-14-0	Other inorganic materials	0,020	0%	1100	0%	511
	Zinc(Zn)	7440-66-6	Non-ferrous metals and alloys	0,027	0%	1500	0%	697
	Silver(Ag)	7440-22-4	Precious metals	0,004	0%	200	0%	93
	Nickel(Ni)	7440-02-0	Non-ferrous metals and alloys	0,232	1%	13001	1%	6043
	Gold(Au)	7440-57-5	Precious metals	0,004	0%	200	0%	93
	Palladium(Pd)	7440-05-3	Precious metals	0,009	0%	500	0%	232
subtotal				17,883	100%	1000000	46%	464832
Die attach	Silver(Ag)	7440-22-4	Precious metals	0,215	77%	770000	1%	5577
	Additive 1	Proprietary	Organic materials	0,003	1%	10000	0%	72
	Additive 2	Proprietary	Organic materials	0,003	1%	10000	0%	72
	Peroxide 1	Proprietary		0,003	1%	10000	0%	72
	Peroxide 2	Proprietary		0,003	1%	10000	0%	72
	Epoxy Resin	9003-36-5	Organic materials	0,003	1%	10000	0%	72
	Acrylate	Proprietary	Organic materials	0,020	7%	70000	0%	507
	Butadiene copolymer	Proprietary	Organic materials	0,003	1%	10000	0%	72
	Polybutadiene derivative	Proprietary		0,011	4%	40000	0%	290
	Acrylic resin	Proprietary	Organic materials	0,017	6%	60000	0%	435
subtotal				0,279	100%	1000000	1%	7243
Bonding wires	Copper(Cu)	7440-50-8	Non-ferrous metals and alloys	0,097	97%	965000	0%	2531
	Palladium(Pd)	7440-05-3	Precious metals	0,003	3%	30000	0%	79
	(Gold(Au)	7440-57-5	Precious metals	0,001	1%	5000	0%	13
subtotal				0,101	100%	1000000	0%	2623
Plating	Nickel(Ni)	7440-02-0	Non-ferrous metals and alloys	0,117	93%	925056	0%	3032
	Palladium(Pd)	7440-05-3	Precious metals	0,009	7%	74944	0%	246
subtotal				0,126	100%	1000000	0%	3032
Encapsulation (Mold Compound)	Epoxy Resin A	Proprietary	Organic materials	0,542	3%	30000	1%	14084
	Epoxy Resin B	Proprietary	Organic materials	0,542	3%	30000	1%	14084
	Phenol Resin	Proprietary		0,542	3%	30000	1%	14084
	Silica (Amorphous)A	60676-86-0	Other inorganic materials	13,546	75%	750000	35%	352094
	Silica (Amorphous)B	7631-86-9	Other inorganic materials	2,709	15%	150000	7%	70419
	Metal hydroxide	Proprietary		0,090	1%	5000	0%	2347
	Carbon Black	1333-86-4	Other organic materials	0,090	1%	5000	0%	2347
subtotal				18,061	100%	1000000	47%	469459
<b>total</b>				<b>38,472</b>			<b>100%</b>	

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