

**LINEAR TECHNOLOGY MATERIALS DECLARATION**

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(Engineering Calculation)

GQFN 5mm X 6mm Exp. Pad

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**TOTAL MASS (g) : 0.079601**

COMPONENT MATERIAL	VENDOR/ INDUSTRY NAMES	CONSTITUENT NAME	CAS NUMBER	CONSTITUENT MASS (g)	CONSTITUENT (PPM) OF MATERIAL	CONSTITUENT (PPM) OF TOTAL PKG.		
Active Device	Linear Technology	Silicon (Si)	7440-21-3	0.002688	1000000	33768.2109375		
Die Coat	Dow Corning	Silicone	69430-27-9	0.000000	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.034391	975000	432039.6875		
		Iron (Fe)	7439-89-6	0.000847	24000	10640.5048828		
		Phosphorus (P)	7723-14-0	0.000011	300	138.18838501		
		Zinc (Zn)	7440-66-6	0.000025	700	314.064483643		
		Nickel (Ni)	7440-02-0	0.000000	0	0		
		Silicon (Si)	7440-21-3	0.000000	0	0		
		Magnesium (Mg)	7439-95-4	0.000000	0	0		
		Tin (Sn)	7440-31-5	0.000000	0	0		
<b>Lead Frame Total:</b>				<b>0.035274</b>	<b>1000000</b>	<b>443132.40625</b>		
Plating	PMI	Exter. Plating Pb	7439-92-1	0.000000	0	0		
		Exter. Plating Sn	7440-31-5	0.001696	1000000	21312.2441406		
		<b>External Plating Total:</b>				<b>0.001696</b>	<b>1000000</b>	<b>21312.2441406</b>
		Inter. Plating Ni	7440-02-0	0.000000	0	0		
		Inter. Plating Ag	7440-22-4	0.000765	1000000	9610.37304688		
<b>Internal Plating Total:</b>				<b>0.000765</b>	<b>1000000</b>	<b>9610.37304688</b>		
Die Attach	ELECTRICALLY CONDUCTIVE ADHESIVE	Silver (Ag)	7440-22-4	0.001109	750000	13931.8994141		
		Tin (Sn)	7440-31-5	0.000000	0	0		
		Lead (Pb)	7439-92-1	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.000000	0	0		
		Indium (In)	7440-74-6	0.000000	0	0		
		Metal Oxide		0.000000	0	0		
		Antimony (Sb)	7440-36-0	0.000000	0	0		
		Resin (EP)		0.000370	250000	4648.15429688		
<b>Die Attach Total:</b>				<b>0.001479</b>	<b>1000000</b>	<b>18580.0546875</b>		
Encapsulation	MULTI-AROMATIC RESIN/Br/Sb FREE	Resin (EP)		0.004313	115000	54182.4023438		
		Bromine (Br)	40039-93-8	0.000000	0	0		
		Silica (SiO2)	60676-86-0	0.033007	880000	414653.03125		
		Antimony Trioxide (Sb2O3)	1309-64-4	0.000000	0	0		
		Metal Hydroxide		0.000000	0	0		
		Carbon Black (C)	1333-86-4	0.000188	5000	2361.76489258		
		<b>Encapsulation Total:</b>				<b>0.037508</b>	<b>1000000</b>	<b>471197.21875</b>
Bond Wire Estimated	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.000191	1000000	2399.45239258		
					<b>TOTAL MASS (g) :</b>	<b>0.079601</b>		