

## LINEAR TECHNOLOGY MATERIALS DECLARATION

LT1963AEQ-3.3#PBF		(Engineering Calculation)		DDPAK				
(printed on: 7/16/2011 1:05:25 PM)				TOTAL MASS (g):		1.398345		
COMPONENT	VENDOR/	CONSTITUENT	CAS	CONSTITUENT	CONSTITUENT	CONSTITUENT		
MATERIAL	INDUSTRY NAMES	NAME	NUMBER	MASS (g)	(PPM) OF MATERIAL	(PPM) OF TOTAL PKG.		
Active Device	Linear Technology	Silicon (Si)	7440-21-3	0.003006	1000000	2149.684		
Die Coat	Dow Corning	Silicone	67762-90-7	0	0	0		
Lead Frame	Cu	Copper (Cu)	7440-50-8	0.852419	998500	609591.3		
		Iron (Fe)	7439-89-6	0	0	0		
		Phosphorus (P)	7723-14-0	0	0	0		
		Zinc (Zn)	7440-66-6	0	0	0		
		Nickel (Ni)	7440-02-0	0	0	0		
		Silicon (Si)	7440-21-3	0	0	0		
		Magnesium (Mg)	7439-95-4	0	0	0		
		Tin (Sn)	7440-31-5	0.001281	1500	916.0829		
		<b>Lead Frame Total:</b>				<b>0.854981</b>	<b>1000000</b>	<b>611423.4</b>
Plating	PMI	Exter. Plating Pb	7439-92-1	0	0	0		
		Exter. Plating Sn	7440-31-5	0.009978218	1000000	7135.733		
		<b>External Plating Total:</b>				<b>0.009978218</b>	<b>1000000</b>	<b>7135.733</b>
		Inter. Plating Ni	7440-02-0	0.004	740740.8	2860.524		
		Inter. Plating Ag	7440-22-4	0.0014	259259.3	1001.183		
		<b>Internal Plating Total:</b>				<b>0.0054</b>	<b>1000000</b>	<b>3861.708</b>
Die Attach	95Pb / 5 Sn	Silver (Ag)	7440-22-4	0	0	0		
		Tin (Sn)	7440-31-5	8.00E-05	50000	57.21048		
		Lead (Pb)	7439-92-1	0.001512	950000	1081.278		
		Silica (SiO2)	60676-86-0	0	0	0		
		Metal Oxide		0	0	0		
		Antimony (Sb)	7440-36-0	0	0	0		
		Resin (EP)		0	0	0		
<b>Die Attach Total:</b>				<b>0.001592</b>	<b>1000000</b>	<b>1138.489</b>		
Encapsulation	MULTI-AROMATIC RESIN Br/Sb FREE	Resin (EP)		0.053704	103000	38405.4		
		Bromine (Br)	40039-93-8	0	0	0		
		Silica (SiO2)	60676-86-0	0.466653	895000	333718		
		Antimony	1309-64-4	0	0	0		
		Trioxide (Sb2O3)						
		Metal Hydroxid		0	0	0		
		Carbon Black (C)	1333-86-4	0.001043	2000	745.8817		
<b>Encapsulation Total:</b>				<b>0.5214</b>	<b>1000000</b>	<b>372869.3</b>		
Bond Wire	AFW/TANAKA/ Kn	Gold (Au)	7440-57-5	0.001988	1000000	1421.681		
Estimated								
<b>TOTAL MASS (g):</b>						<b>1.398345</b>		