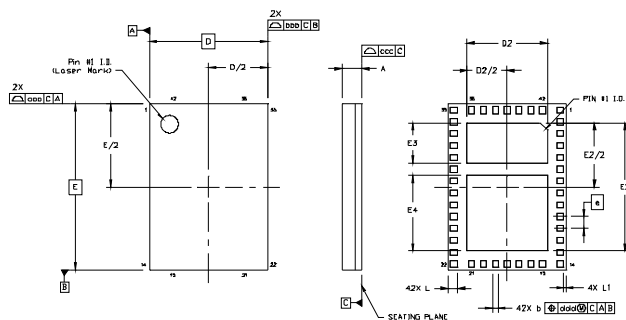




Selected Electrical Specifications

Parameter	Symbol	Test Condition	Min	Typical	Max	Unit
Ambient Temperature	T_A	F-Grade	0	25	70	°C
		G-Grade	-40	25	85	°C
Supply Voltage	V_{DD}		3.13	3.3	3.47	V
Battery Voltage, Si32171/2/5/6	V_{BAT}		-110	-95	-15	V
Battery Voltage, Si32171/3/7	V_{BAT}		-140	-130	-15	V
Maximum Loop Resistance (loop + load)	R_{LOOP}	$R_{DC,MAX} = 430 \Omega$, $I_{LOOP} = 18 \text{ mA}$, $V_{BAT} = -52 \text{ V}$, $R_{PROT} = 0 \Omega$,	—	—	2000	Ω
DC Differential Output Resistance	R_{DO}	$I_{LOOP} < I_{LIM}$	160	—	640	Ω
Idle Channel Noise		C-Message weighted	—	8	12	dBrnC
		Psophometric weighted	—	-82	-78	dBmP
PSRR from V_{DD} , V_{DDIO} @ 3.3 V		RX and TX, 200 Hz to 3.4 kHz	—	55	0	dB
Longitudinal to Metallic/PCM Balance (forward or reverse)		200 Hz to 1 kHz	58	60	—	dB
		1 kHz to 3.4 kHz	53	58	—	dB
Metallic/PCM to Longitudinal Balance		200 Hz to 3.4 kHz	40	—	—	dB
Longitudinal Impedance		200 Hz to 3.4 kHz at TIP or RING	—	50	—	Ω
Longitudinal Current Capability		Active off-hook 60 Hz Reg 73 = 0x0B	—	25	—	mA
DC Feed Current		Differential	—	—	45	mA
		Common Mode	—	—	30	mA
		Differential + Common Mode	—	—	45	mA
2-Wire Return Loss		200 Hz to 3.4 kHz	26	30	—	dB
Transhybrid Balance		300 Hz to 3.4 kHz	26	30	—	dB
Thermal Resistance (QFN-42)	Θ_{JA}		—	53	—	°C/W
	Θ_{JB}		—	33	—	
	Θ_{JC}		—	39	—	
Continuous Power Dissipation (QFN-42)	PD	$T_A = 85 \text{ °C}$	—	0.75	—	W

Package Information



42-Pin QFN/LGA Package Diagram Dimensions

Dimension	Min	Nom	Max
A	0.80	0.85	0.90
b	0.20	0.25	0.30
D	5.00 BSC		
D2	3.35	3.40	3.45
e	0.50 BSC		
E	7.00 BSC		
E2	5.35	5.40	5.45
E3	1.65	1.70	1.75
E4	3.15	3.20	3.25
L	0.35	0.40	0.45
L1	0.05	0.10	0.15
aaa	—	—	0.10
bbb	—	—	0.10
ccc	—	—	0.08
ddd	—	—	0.10