

Selected Electrical Specifications

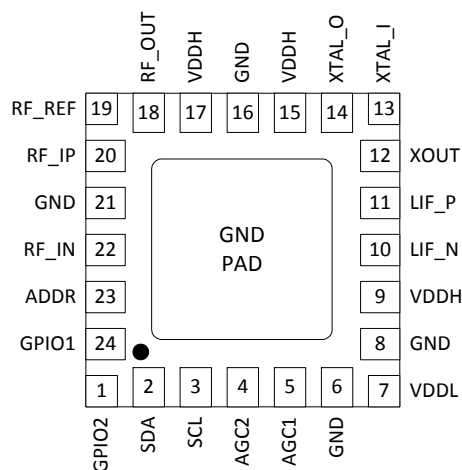
 $(V_{DDH} = 3.3 \text{ V}, V_{DDI} = 1.8 \text{ V}, T_A = 25^\circ \text{C})$

Parameter	Test Condition	Typ	Unit
Supply voltage		1.8 and 3.3, or only 3.3	V
Total Power Consumption	External 1.8 V supply, LT disabled	486	mW
RF Input Frequency Range		42 to 870	MHz
NF, Terrestrial Mode	VHF-L1 (42–106 MHz)	4.5	dB
	VHF-L2 (107–247 MHz)	2.4	dB
	VHF-H (248–470 MHz)	3.0	dB
	UHF (471–870 MHz)	4.0	dB
LO Phase Noise at 860 MHz	1 kHz 10 kHz 100 kHz 1 MHz	−100 −100 −105 −132	dBc/Hz
LO Integrated Phase Noise at 860 MHz	DSB: 125 Hz to 4 MHz	0.25 (−47)	°rms (dBc)
LIF Output Center Frequency	Channel BW = 6 MHz 7 MHz 8 MHz	4 to 7 4.5 to 6.5 5 to 6	MHz
LIF Differential Output Voltage	Programmable	0.5 to 2.0	V _{ppd}
Loop Through Output			
RF Frequency Range (LT only)		42 to 870	MHz
LT Output Return Loss (Active)		10	dB
LT Noise Figure (Active)	Max gain	6.7	dB
LT Gain	Active mode	2.2	dB
	Zero-power mode	−3.2	dB
*Note: Includes all connector, PCB and front-end circuit losses at the F-connector input of the Si2124 EVB.			

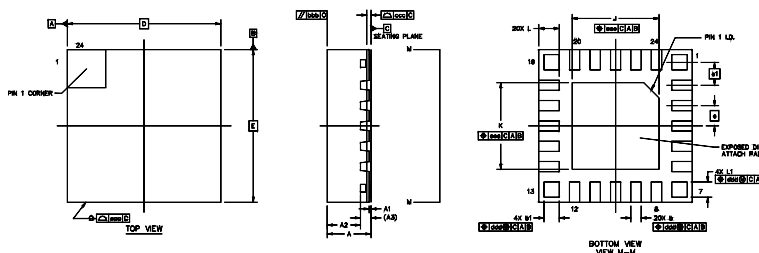
Selection Guide

Part #	Description
Si2124	Digital terrestrial Set Top Box tuner for ATSC, DVB-T2/T, ISDB-T

Pin Assignments



3x3 mm QFN-24 Package Information



Dimension	Min	Nom	Max	Unit
A	0.80	0.85	0.90	mm
D, E	3.00 BSC			mm
e	0.40 BSC			mm
e1	0.45 BSC			mm
J, K	1.60	1.70	1.80	mm