

Selected Electrical Specifications

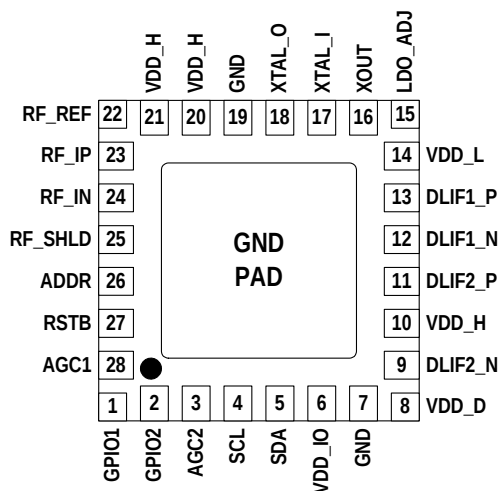
($V_{DD_H}=3.3\text{ V}$, $V_{DD_L}=1.8\text{ V}$, $V_{DD_D}=1.8\text{ V}$, $T_A=25\text{ }^{\circ}\text{C}$)

Parameter	Test Condition	Typ	Unit
Supply voltage		1.8 and 3.3, or only 3.3	V
Total Power Consumption	XOUT Disabled	484	mW
RF Input Frequency Range		42 to 870	MHz
NF, terrestrial*	VHF-L	4.0	dB
	VHF-H	3.7	dB
	UHF	3.8	dB
Return Loss*	Terrestrial mode	3	dB
	Cable mode	9	dB
Wideband IIP3*	VHF-H, $N\pm 18$, ± 36	+5	dBm
Inband IIP3*	VHF-H, $N\pm 1$, ± 2	-6	dBm
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)	$^{\circ}\text{rms}$ (dBc)
DLIF Output Center Frequency	channel BW=6 MHz 7 MHz 8 MHz	4 to 7 4.5 to 6.5 5 to 6	MHz
DLIF Differential Output Voltage	Programmable	0.5 to 2.0	Vppd
*Note: Measured at the F-connector input of the Si2147 EVB and includes all connector, PCB, and front-end circuit losses.			

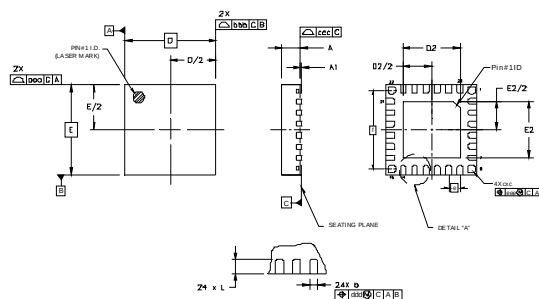
Selection Guide

Part #	Description
Si2147	Worldwide digital TV tuner for ATSC/QAM, DVB-T2/T/C2/C, ISDB-T/C, DTMB

Pin Assignments



4x4 mm QFN-28 Package Information



Symbol	Min	Nom	Max	Unit
A	0.80	0.85	0.90	mm
D, E	4.00 BSC			mm
e	0.50 BSC			mm
f	3.50 BSC			mm