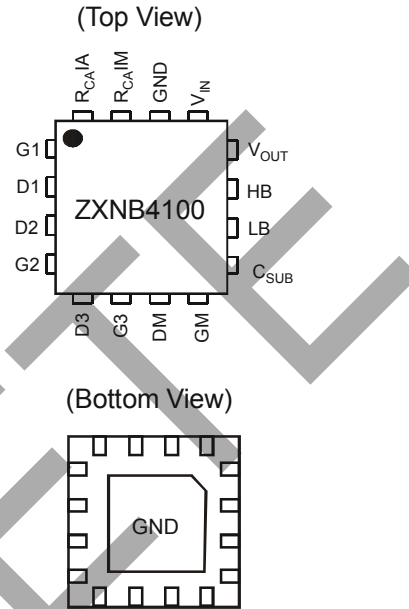


Summary

The ZXNB4100 is a single chip power management and control solution for LNB's. The highly integrated solution provides all the required FET and mixer bias, control detection and decoding, local oscillator switching and a stable power supply for the IF amplifier and additional support functions. Packaged in a small 16 pin package the ZXNB only requires 3 external components providing a very small compact solution. Being at the heart of the LNB monitoring the control, power management and environmental conditions, the ZXNB4100 is able to provide reliable solution eliminating effects such as false switching and over loading.

With the ZXNB4100, the user must take into account the likely power dissipation, the recommended maximum die temperature, the maximum ambient temperature and the combined thermal resistance of the ZXNB4100 and its PCB mounting arrangement. Diodes has developed a calculator as a guide which can help with this analysis and design considerations.

Pin Assignments



Features

- Single chip LNB bias, control and power management
- Integrated regulated supply for LNB
- Negative volt gate FET switching topology
- Voltage detection for polarization switching
- 22kHz tone detector with unwanted signal rejection for band switching
- No external control signal filtering required
- Programmable mixer and FET bias
- Temperature compensated protected FET bias
- Full power management protection

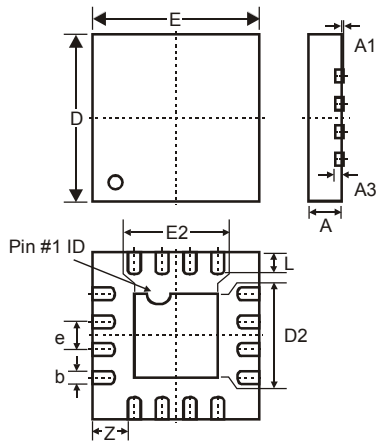
Applications

- Single and Single Universal LNBs
- Mono-block LNB's
- C-band LNB's

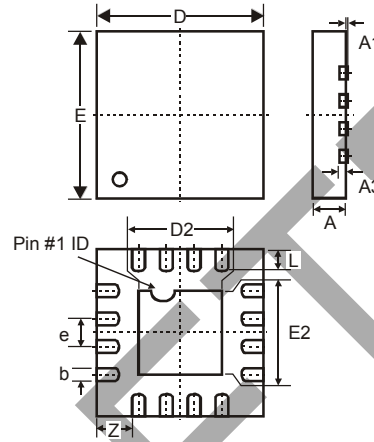
Ordering Information

Device	Package	Reel Size (inches)	Tape Width (mm)	Quantity (per reel)
ZXNB4100JA16TC	QFN1633	13	8	3000
ZXNB4100JB16TC	QFN1644	13	12	3000

Package Outline Dimensions (All Dimensions in mm)



QFN16 3x3		
Dim	Min	Max
A	0.55	0.65
A1	0.00	0.05
A3	0.15 Typ	
b	0.18	0.28
D	2.95	3.05
D2	1.40	1.60
e	0.50 BSC	
E	2.95	3.05
E2	1.40	1.60
L	0.35	0.45
Z	0.625 Typ	
All Dimensions in mm		



QFN16 4x4		
Dim	Min	Max
A	0.55	0.65
A1	0.00	0.05
A3	0.15 Typ	
b	0.25	0.35
D	3.95	4.05
D2	2.40	2.60
e	0.65 BSC	
E	3.95	4.05
E2	2.40	2.60
L	0.35	0.45
Z	0.875 Typ	
All Dimensions in mm		

OBSOLETE – PART DISCONTINUED

OBSOLETE

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