About the Cover
Andrew J. Anderson, VK3CV/WQ1S, shows a simple, low cost way to get on the 122 GHz amateur band using an off-the-shelf integrated transceiver chip from Silicon Radar. The chip was originally designed for proximity measurements and radar applications. It features 0.5 mW RF output power, and the receiver path includes a preamplifier with a respectable noise figure. Its voltage controlled oscillator (VCO) can easily be frequency locked to an external phase locked loop (PLL) that operates at 1900 MHz. All the 122 GHz signals are inside the chip. The design interfaces the on-chip transmit and receive antennas to external high gain antennas.

In This Issue

Features

2 Perspectives
Kazimierz “Kai” Siwiak, KE4PT

3 A Simple 122 GHz Transverter
Andrew J. Anderson, VK3CV/WQ1S

12 General Uniform Transmission Lines: Power Efficiency, Loss, Standing Wave Ratio, and Return Loss
Steve Stearns, K6OIK

24 Extend the Matching Range of Your 80 m Antenna
Bob DePierre, K8KI

28 Collection of Broadband HF Antenna Designs, Part 2
Jacek Pawlowski, SP3L

36 Upcoming Conferences

Index of Advertisers
DX Engineering: ..........................Cover III
Kenwood Communications: .............Cover II
SteppIR Communication Systems.....Cover IV