About the Cover

John Westmoreland, AJ6BC, discusses the origins of the Themis project and its design goals. Themis is an experimental Global Positioning System Disciplined Oscillator (GPSDO) for the Open High Performance Software Defined Radio, that can also be used as a stand-alone source for supplying a 10 MHz reference clock output. It includes an output to the Atlas bus, and provides several additional outputs intended for various levels of experimentation. AJ6BC describes the GPSDO control algorithms and some techniques for disciplining and synchronizing an Oven Controlled Crystal Oscillator (OCXO) with the GPS satellite system one-pulse-per-second (1PPS) signaling.

In This Issue

Features

2 Perspectives
Kazimierz “Kai” Siwiak, KE4PT

3 Themis
John C. Westmoreland, AJ6BC

14 A Different Look at the Phase Locked Loop
Andrzej (Andy) Przedpelski, KØABP

16 Get Started with 3D Printing
Joseph Pingree, WB2TVB

20 Pi Networks With or Without Inductor Loss — Part 1
Tuck Choy, MØTCC

29 Errata

30 Receiver Step Attenuator
Scott Roleson, KC7CJ

36 Upcoming Conferences

Index of Advertisers
DX Engineering: .........................Cover III
Harris Corporation: ........................19
Kenwood Communications: ..............Cover II
StepPIR Communication Systems.....Cover IV
Tucson Amateur Packet Radio: ..........29

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