

CIRCUIT CELLAR

THE MAGAZINE FOR COMPUTER APPLICATIONS

#233 December 2009

PROGRAMMABLE LOGIC

Retrocomputing with
Programmable Logic

Microprogramming
with FPGAs

Addressing Memory
Failures

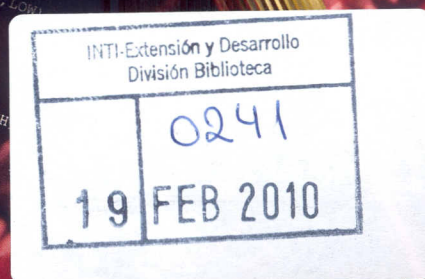
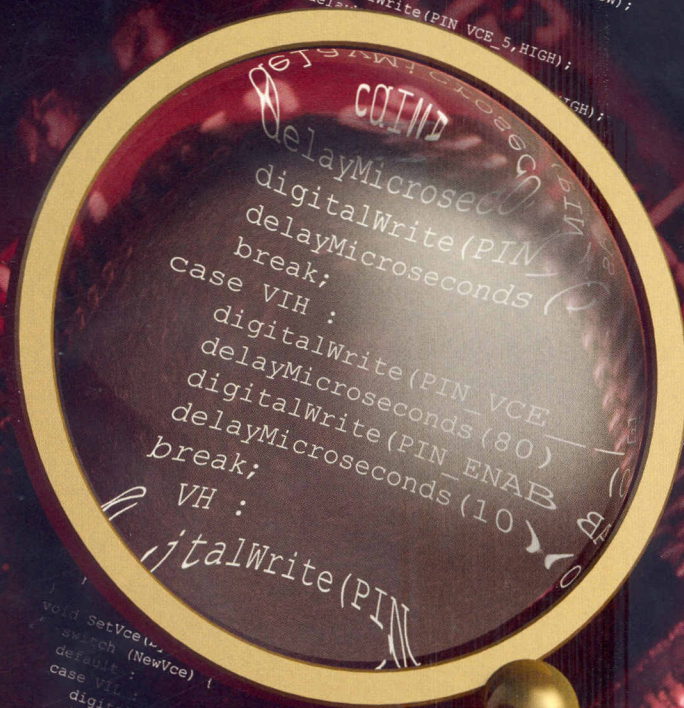
Digital Modulation
Theory

6LoWPAN Explained

ELECTRONICA

Depósito

008



INSIDE ISSUE

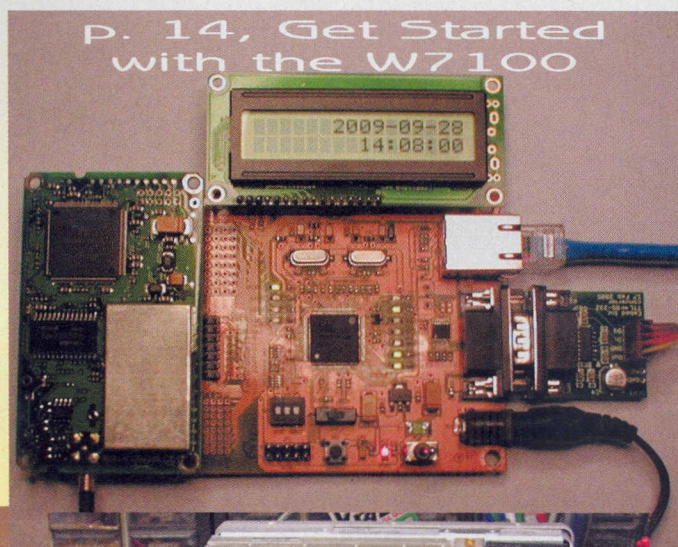
233

December 2009 • Programmable Logic

- 14** **iMCU W7100**
Embedded Networking Made Simple
Dave Tweed
2010 WIZnet iMCU Design Contest Primer

- 24** **Retrocomputing on an FPGA**
Reconstruct an '80s-Era Home
Computer with Programmable Logic
Stephen A. Edwards

- 36** **Building Microprogrammed Machines
with FPGAs**
Thomas Mitchell



- 44** **ABOVE THE GROUND PLANE**
Memories Are Not Forever
Ed Nisely
- 54** **THE DARKER SIDE**
Digital Modulations Demystified
Robert Lacoste
- 64** **FROM THE BENCH**
Extend and Isolate the I²C Bus
Jeff Bachiochi
- 70** **SILICON UPDATE**
IP Unplugged
Tom Cantrell

- TASK MANAGER** **4**
Looking Back While Moving Forward
C. J. Abate
- NEW PRODUCT NEWS** **8**
edited by John Gorsky
- CROSSWORD** **74**
- INDEX OF ADVERTISERS** **79**
January Preview
- PRIORITY INTERRUPT** **80**
Home Automation: Everything and Nothing
Steve Ciarcia