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PROJECT FILES

All of the project files for this issue are available at:
ftp://ftp.circuitcellar.com/pub/Circuit_Cellar/2014/292/

ARTICLE MATERIALS

Author: Randy Song & Alexander Ngai
Article: "The Pressure Is On"

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B. Land "Prototype Board for Atmel Mega644," Cornell University,
<http://people.ece.cornell.edu/land/PROJECTS/ProtoBoard476/>.

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ATmega1284p Microcontroller
Atmel Corp. | www.atmel.com

FT232R USB-to-serial UART interface
Future Technology Devices International | www.ftdichip.com

Author: Shane Soh & Eileen Liu
Article: "Ultrasonic Wayfinder"

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Atmel Corp., "8-Bit Atmel Microcontroller with 16/32/128K Bytes In-System Programmable Flash," 8272C-AVR-06/11, 2011.

B. Land, "A Preemptive Kernel for Atmel Mega1284 Microcontrollers," ECE4760, Cornell University, 2013, <http://people.ece.cornell.edu/land/courses/ece4760/TinyRealTime/>.

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<http://people.ece.cornell.edu/land/PROJECTS/ProtoBoard476/>.

MaxBotix, "LV-MaxSonar-EX0 High Performance Sonar Range Finder," PD10001, 2012.

M. Prasad, "The ADC of the AVR," 2011,
<http://maxembedded.com/2011/06/20/the-adc-of-the-avr/>.

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MB1000 LV-MaxSonar-EZ0 sonar range finder
MaxBotix | www.maxbotix.com

Author: Jerry Brown

Article: "MCU-Based Control Display Component"

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Author: Ayse Coskun

Article: "Budgeting Power in Data Centers"

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[1] O. Tuncer, K. Vaidyanathan, K. Gross, and A. K. Coskun, "CoolBudget: Data Center Power Budgeting with Workload and Cooling Asymmetry Awareness," in Proceedings of IEEE International Conference on Computer Design (ICCD), October 2014.

[2] Q. Tang, T. Mukherjee, S. K. S. Gupta, and P. Cayton, "Sensor-Based fast Thermal Evaluation Model for Energy Efficient High-Performance Datacenters," in ICISIP-06, October 2006.

[3] J. Moore, J. Chase, P. Ranganathan, and R. Sharma, "Making Scheduling 'Cool': Temperature-Aware Workload Placement in Data Centers," in USENIX ATC-05, 2005.

[4] CVX Research, "CVX: Matlab Software for Disciplined Convex Programming," Version 2.1, September 2014, <http://cvxr.com/cvx/>.

Author: George Novacek

Article: "Inductors 101"

RESOURCES

H. Morehouse, "Everything You Wanted to Know About Gytrators But Were Afraid to Ask," Beige Bag Software, www.beigebag.com/case_gyrator.htm.

G. Novacek, "Wireless Data Links (Part 1)," Circuit Cellar 283, 2014.

Oltronix, "Theory of Operation: Ferroresonant Regulators," www.oltronix.nl/en/ferroresonant-principle.

P. Park, C. S. Kim, M. Y. Park, S. D. Kim, and H. K. Yu, "Variable Inductance Multilayer Inductor with MOSFET Switch Control," IEEE Xplore, <http://bit.ly/1zFO6du>.

Author: Ed Nisley

Article: "Universal Motor Control Vs. Transistor SOA"

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E. Nisley, "Kenmore 158: Hall Effect Speed Control Pedal," <http://softsolder.com/2014/07/09/kenmore-158-hall-effect-speed-control-pedal/>.

—, "Kenmore Model 158 Sewing Machine: Cool White LED Strip Lights," <http://softsolder.com/2014/04/02/kenmore-model-158-sewing-machine-cool-white-led-strip-lights/>.

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Wikipedia.org, "Universal AC-DC Motors," https://en.wikipedia.org/wiki/Universal_motor.

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IXYS Corp. | <http://ixys.com/PartSearchResults.aspx?searchStr=ixtn62n50l>

M Series stepper driver

Leadshine Technology Co. | www.leadshine.com

Author: Jeff Bachiochi

Article: "Embedded Voice Recognition (Part 2)"

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<http://audacity.sourceforge.net/>

EasyVR Module and EasyVR development kit

TIGAL KG | www.veear.eu

Liberty BASIC

Shoptalk Systems | www.libertybasic.com

PIC18F26K22 Microcontroller

Microchip Technology, Inc. | www.microchip.com

RSC-4x Speech recognition and synthesis microcontrollers

Sensory, Inc. | www.sensory.com