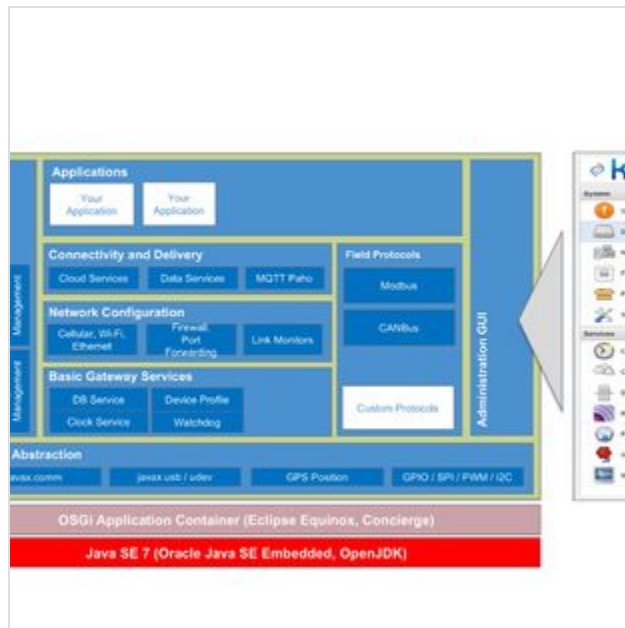


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IT-centric IoT device management using Java and Eclipse Kura



Walt Bowers, Eurotech

Java-based device application frameworks in the Open Services Gateway initiative (OSGi) model can speed development of Internet of Things (IoT) gateways and applications, as well as offer advanced remote management capabilities not available through traditional embedded agents. The edge of the Internet of Things (IoT) is where solutions connect, communicate, and interact using sensors, actuators, gateways, agents, and controllers. As technology advances, vendors are touting “advanced management capabilities” for these devices at the edge. These capabilities vary, ranging from the simple ability to turn a device on and off to more complex...

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What I want to see at Embedded World 2016



Rory Dear, European Editor/Technical Contributor

"IoT", "M2M", and "Industrie 4.0" are a few obvious examples of the plethora of buzzwords I've little doubt I will be visually assaulted with as I meander around Nuremberg Messe's Embedded World 2016, the same as I was last year, and the year before that. These technologies generally fit into the category of "connected" or "connected devices". For me, Embedded World 2014 was when these connected-device terminologies really caught the imagination of exhibitors. Of course, as is the case with so many desperate to climb aboard the latest bandwagon, what they actually...

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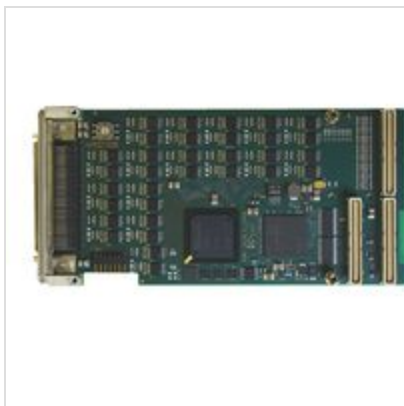
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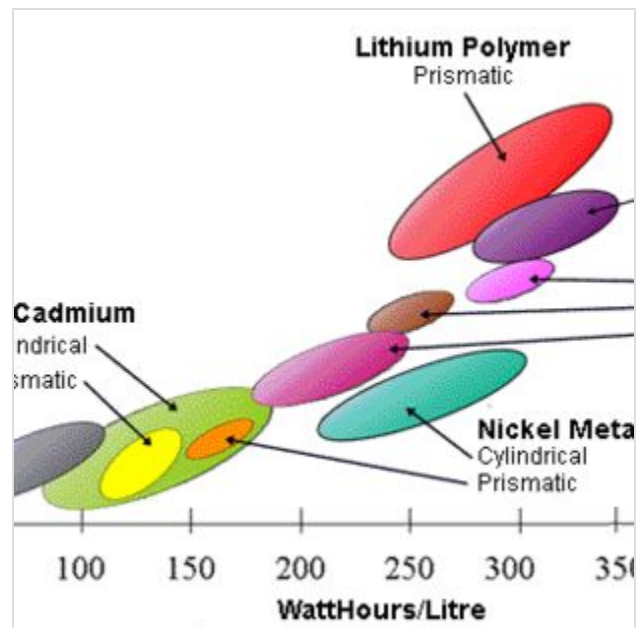
Hardware emulation to debug embedded system software



Lauro Rizzatti, Verification Consultant

In today's competitive landscape, getting complex electronic devices rich in embedded software to market faster while making them cheaper and more reliable is a very risky proposition. Not thoroughly testing hardware designs inexorably lead to respins, increasing design costs and lengthening delivery of the netlist to the layout process, and ultimately delaying the time-to-market target with devastating effects on the revenue stream. Even more dramatic outcomes of missing market windows hide in late testing of embedded software. It's no surprise that the verification portion of the project cycle takes a disproportionately large amount...

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Charging and gas gauging for mobile devices



Ken Tough, Director of Software Engineering,

Intrinsyc Technologies

Ensure a great experience for end users with proper gas gauging. Operating effectively from a battery is a core requirement for mobile devices. Good battery-powered behavior is crucial for a product's success. Battery-powered operation revolves around three major aspects: Well-tuned system power consumption Appropriate battery charging Accurate fuel- or gas-gauge prediction of battery state For mobile devices, tuning the system power consumption starts with defining the device use-cases and modeling the power consumption in its various modes. Normally this include a low "static" suspend state, when the device is not in use,...

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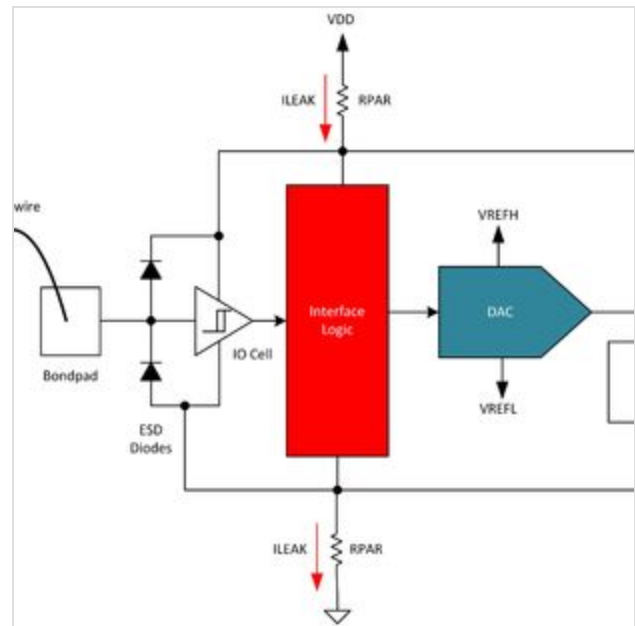
Tear Down: Misfit Shine 2 Fitness tracker



Rich Nass, Embedded Computing Brand Director

By taking advantage of a sub-threshold design, the Misfit Shine 2 operates at voltages that greatly extend battery life. I've gone through more than my share of fitness trackers over the last year or so. Part of the reason is that I'm somewhat fussy about technology, and part is because I was doing research for a pair of Tear Down articles. One of those articles is based on the Misfit Shine 2 device, and the next one is the Garmin Forerunner 230, which is based on GPS technology (that'll b the next...

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How to preserve signal-chain integrity when interfacing microcontrollers with DACs



Rahul Prakash, Texas Instruments

A microcontroller is one of the most power-hungry components in an industrial system. As the Industry 4.0 standard becomes more popular, microcontrollers are taking on more and more of a computing burden. As a consequence, we are seeing an explosive increase in microcontroller power consumption. One way to manage power is to reduce the supply [...]

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White Paper: Next Generation Bill of Materials Management: Beyond BOM 101



Staff, Arena Solutions

In the world of product development and manufacturing, the bill of materials (BOM) is a critical product information record for both the engineering and manufacturing teams. Traditionally, BOMs have been created and updated in spreadsheets, and communicated to internal teams, outsourced manufacturers and suppliers via e-mail, phone or fax. Usually, final BOMs are also loaded into the ERP systems. However, compressed product lifecycles, geographically dispersed project teams, cost pressures, outsourced partnerships, and stringent regulatory requirements are challenging the traditional BOM management and communication in a number of ways: - Modern BOMs are...

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SYNOPSIS: A one-hour, live, moderated problem/solution technical webcast.

Using default time zone: America/New_York

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Presented by: Ayla Networks, Flexera Software

Moderated by: CURT SCHWADERER, OPENSYSTEMS MEDIA

March 1st
2 pm EST

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[Using open source technologies to rapidly build secure IoT devices](#)

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Presented by: Sierra Wireless

Moderated by: JOHN MCHALE, OPENSYSTEMS MEDIA

March 9th
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[Real-world Implementation on the Industrial Internet](#)

2016-02-24

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Presented by: Ayla Networks

Moderated by: CURT SCHWADERER, OPENSYSTEMS MEDIA

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[How OPC UA fuels the Industrial Internet of Things with TI Sitara\(tm\) Processors](#)

2016-02-24

Presented by: Texas Instruments

Moderated by: CURT SCHWADERER, OPENSYSTEMS MEDIA

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Last updated: [Wed, 24 Feb 2016 22:02:41 +0000](#)

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subject: "What WE want to see at embedded world; Java, Eclipse, open source, and IoT interoperability; and more in the Embedded Computing Design February E-letter".