Embedded Daily
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ERP software use grows in small businesses


Karandeep Virdi, Progressive Markets

Enterprise resource planning (ERP) has gained popularity as it simplifies the managing of business operations is gradually being implemented in small to large enterprises worldwide. The ERP software lets organizations access a system of highly integrated applications and assists in specific back-office activities. Large businesses have embraced the technology and the trend is gradually catching up with medium and small business. For small businesses, ERP software can boost sales, formulate manufacturing production goals, and develop high-quality parts required by the customer. Progressive Markets recently? **Continued...**

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January 26, 2pm ET

The future of dual-clutch transmissions


Abhishek Budholiya, Future Market Insights

The future of dual-clutch transmission (DCT) as a type of automated automotive transmission will unlock multiple opportunities for automakers from all corners of the world by with enhanced vehicle performance. Considering the present alternatives for DCT technology, automobile manufacturers are anxious to replace it with something more efficient. The likelihood of advancements being incorporated in the existing DCT mechanism, however, seems plausible. Future drivers will undoubtedly prefer the smooth gear-shifting offered through dual-clutch transmission technology . DCT effortlessly secures a strong position as it? **Continued...**

Vision guided robots will gain ground in industrial sectors


Khusro Khan, Transparency Market Research

A vision guided robot is a robot fitted with one or more cameras used to analyze, inspect images, and provide secondary data signal to the controller. These robot systems are rapidly changing the production process, as they enable the adoption and implementation of robots into the system. The rapid change will also decrease the cost and complexity of fixed tooling in setting up of robotic cells. The vision guided robot system comprises a camera and a computer. These robots primarily capture images and transfer? **Continued...**

Zinn: An aggressive CEO makes a big difference

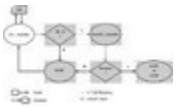
Rich Nass, Embedded Computing Brand Director

The CEO of nVidia, Jen-Hsun Huang, spends a lot of time talking about how great his company is and how great their products are. I?d likely agree with that assessment, but the discussion for this week was whether it?s better to have an aggressive CEO verses one that?s very quiet and laid back and, in theory at least, more enjoyable to work with. Ray Zinn, who guided Micrel for 37 years falls into the middle of that spectrum, but leaning more toward the laid? Continued...

Security and the Cortex-M MPU, part 4: SWI API for MPU systems

Ralph Moore, Micro Digital

The Cortex-M v7 memory protection unit (MPU) is difficult to use, but it is the main means of hardware memory protection available for Cortex-M3, -M4, and -M7 processors[1]. These processors are in widespread use in small- to medium-size embedded systems. Hence, it is important to learn to use the Cortex-M v7 MPU effectively in order to achieve the reliability, security, and safety that modern embedded systems require.



A source-annotation-based framework for structural coverage analysis tool testing

Olivier Hainque, AdaCore

Automated testing of software tools always requires some way of comparing what the tool does against what we expect it to do. Testing compilers, for example, usually entails verifying the behavior of compiled programs, checking compilation error messages, or analyzing the generated machine code. For static or dynamic analysis tools, this typically involves checking the tool outputs for well-defined sets of inputs.

Distributed Trust Ecosystem key to autonomous driving future

Brian Spector, MIRACL

It?s no secret that advanced driver assistance systems (ADAS) and the fast-approaching autonomous driving future are set to transform the mobility market. A countless number of devices will need talk to each other in order to ensure a safe environment: multiple sensors and systems within the car will communicate securely at lightning speed while the vehicle itself will be tuned into its surroundings via vehicle-to-vehicle (V2V), vehicle-to-infrastructure (V2I) ad hoc networks, and more. Road conditions, precise position, speed, traffic signals and the location of other vehicles are just some of the data that go into this mix.

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