Certified COMs Deliver Quality

UL Certified COMS
Equal Quality, Reliability
and Security for OEMs

ETX

ETXepress

E2Brain

X-Board

DIMM-PC

| Computer-On Modules | Blades & Mezzanines | CPU Boards | Systems | Mobile Rugged | Custom Solutions |

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Executive Summary

In searching for quality electronics in the U.S., users often look first for a stamp of approval to ensure that a product has gone through some type of rigorous testing and evaluation process. Quality certifications are often easily found for systems themselves, but until very recently were not available for the components within those systems such as Computer on Modules (COMs).

Kontron, a global leader in embedded computing technologies, is the first company to receive Underwriters Laboratory (UL) certification for its COMs products. Companies now have an additional level of security from a respected third party that Kontron's COMs products will perform as expected. The added security and reliability associated with a certified embedded component brings peace of mind never available before in the embedded market.

As the first COMs provider to hold the UL certificate for quality assurance, .Kontron provides OEMs the added benefit that when it comes time for them to obtain their own UL certification, the already-certified COMs will reduce the time-to-market for their final product.

Kontron's customer centered focus led it to undertake this effort because the company understood that developers needed assurance that their components were reliable. By providing UL certification, developers have one less issue to contend with in the design process.

Underwriters Laboratory(UL) Certification for Computer-On-Modules (COMs)

By Christine Van De Graaf
Product Marketing Manager, Kontron

Importance of UL Certification

Underwriters Laboratories Inc. (UL) is an independent, not-for-profit product safety testing and certification organization which has been testing products for public safety for over a century. Each year, more than 14 billion UL marks are applied to products worldwide. Since its founding in 1894, UL has held the undisputed reputation as the leader in U.S. product safety and certification, and is becoming one of the best-recognized conformity assessment providers in the world.

Electrical and electronic products sold within the U.S. must meet the U.S. National Electric Code (NEC), as well as various city, county and state electrical codes. In order to comply with these codes, electrical and electronic products must be "listed" as being compliant by an "authority having jurisdiction to identify a listed product. UL has been recognized as the "de-facto" authority for listing products as compliant with U.S. electrical codes, and electrical inspectors and U.S. customs agents look for the UL mark as a demonstration of this compliance.

UL certification for Kontron COMs products is especially attractive for OEMs offering solutions in Canada and the U.S. because, apart from the EN60950 certificate that Kontron has long held, a UL certificate is the absolute seal of quality for the these regional markets.

For more information about products with UL certificates for "Information Technology Equipment Including Electrical Business Equipment" (NWGQ2.E304278 for the US and NWGQ8.E304278 for Canada), visit www.ul.com.

The UL-Certified Module

Kontron's COMs are highly integrated component SBCs that support system expansion and application-specific customization. The CPU module delivers the core functionality while all of the application-specific features are designed into the baseboard creating a semi-custom embedded solution.

Specifically Kontron has achieved the UL certificate – UL 60950-1:2003 First Edition and CSA C22.2 No. 60950-1-03 First Edition from April 1, 2003 – in a large-scale validation process for all COM products following the ETX®, ETXexpress™, microETXexpress™, DIMM-PC®, and X-board™ standards.

Kontron's COMs Products:

➤ *ETXexpress* - ETXexpress modules are the first available products that are 100 percent compliant with the upcoming COM Express standard from PICMG. Five different CPU performance variations of the ETXexpress-PM computer-on-module are available now including ? Get Ready! Get ETXexpress!

➤ *ETX* – ETX is a highly integrated, PC-compatible embedded module based on advanced X86 CPUs (95 x 114 mm).

➤ *E2Brain* – E2Brain is the perfect approach to sophisticated RISC based embedded computers (75 x 115 mm).

➤ *X-Board* – X-Board is a high performance, legacy-free X86 and RISC based Computer-On-Module (68 x 49 mm).

➤ *DIMM-PC* – DIMM-PC is an extremely small, powerful X86 embedded computer module (68 x 40 mm).

Learn more about Kontron and its family of quality, advanced COMs products at www.kontron.com.

About Kontron:

A global leader in embedded computer technology and mobile rugged solutions, Kontron supplies a diversified customer base of OEMs, system integrators, and application providers in the: automation, test and measurement, communications, medical, gaming and entertainment, military, aerospace, transportation, and energy markets. The company helps its customers considerably reduce their time-to-market and gain a competitive advantage with products including: high-performance open computer platforms and systems, single board computers, human-machine interfaces, and mobile rugged computers and displays. Kontron employs more than 2,300 people worldwide and has manufacturing facilities in Europe, North America, and Asia-Pacific. The company is listed on the German TecDAX 30 stock exchange under the symbol "KBC". Kontron is a Premier member in the Intel ® Communications Alliance which means earliest access to leading-edge Intel technologies and privileged engineering support. For additional information on Kontron, please visit www.kontron.com.

AUTHOR'S BIO

Christine Van De Graaf is the Product Marketing Manager of Kontron America's Embedded Modules Division that is located in Northern California's Silicon Valley. She has more than five years experience working in the embedded computing technology industry and holds a Masters of Business Administration, Marketing Management degree from California State University, East Bay (Hayward, CA). Van De Graaf has authored a number of technical articles published in various embedded computing technology trade publications and recently presented at the WindRiver Worldwide Users' Conference on the topic of COM Express and Linux based embedded solutions.

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