

combined approaches enable the realisation of complex multi- $\mu$ -functional solutions.

The newly developed display elements consist of flexible electroluminescent or electrochromic display elements such as colour-emission and high resolution (up to 80ppi). For the electrochromic display elements, the application of a voltage results in a change in the colour, and can be used, for example, to represent fill capacities or absolute values (such as voltage spikes), or to display simple characters. In the electroluminescent display elements, an applied voltage causes a dye to illuminate, for example for night-time or background illumination applications requiring surface (area) lighting.

The incorporation of these two elements means that complex circuits can now be printed and implemented, for example in microfluidics, to represent changes in liquid resistance.

The key to CDA's approach lies in the integration of all required elements into a single compact device, without the need for additional external components. In the event that supplementary logic functions are indeed required, these too can be incorporated using microassembly techniques at CDA.

With the new display elements, CDA can now offer its customers an additional component to further complement the already individual, integrated and cost-effective devices made possible through CDA's combination of microfluidic and micro-optics manufacturing.

**Further information**  
CDA  
[www.cda-microworld.com](http://www.cda-microworld.com)

### Low-power single-chip solution

congatec, a leading manufacturer of embedded computer modules, announces immediate availability of the



**Ideal for high-performance mobile systems: the conga-TC87.**

conga-TC87 Type 6 COM Express compact module supporting fourth-generation Intel Core processors. It is a low-power single-chip solution, codenamed Haswell-ULT, with integrated chipset and graphics. Despite increased performance, the maximum thermal design power (TDP) is a mere 15W.

The fourth-generation Intel Core processors are an optimisation of the existing microarchitecture. Improvements include new microcode and extended registers, an expansion of the vector-processing unit, larger and much more powerful graphics units, as well as standard hardware support for AES encryption. Unique features of the Intel Core i7-4650U and i5-4300U are revised power management; expanded, individually configurable turbo-boost modes; and extensive TDP configuration management for adapting to the chosen cooling solution.

Compared with previous Core i processor models, it is possible to save not only 2W of TDP, but also approximately 4W previously required for the separate PCH solution. The conga-TC87 can be equipped with the embedded dual-core single-chip processors Intel Core i7-4650U, i5-4300U or i3-4010U.

The integrated graphics are considerably more powerful than those of preceding versions, and support Intel flexible display interface, DirectX 11.1, OpenGL 4, OpenCL 1.2 and high-performance, flexible hardware

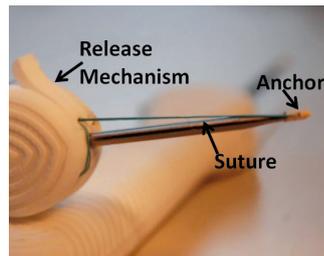
decoding to decode multiple high-resolution full-HD videos in parallel. 4K resolution with up to 3,840x2,160 pixels for DisplayPort is natively supported. It is also possible to connect up to three independent display interfaces via HDMI, LVDS and embedded DisplayPort.

A total of eight USB ports are provided, two of which support USB 3.0 SuperSpeed. Four PCI Express 2.0 lanes, four SATA ports with up to 6GB/s, RAID support and a gigabit ethernet interface enable fast and flexible system extensions.

The strength of this new COM Express compact module lies in the flexibility and scalability of the graphics and processing power, and superior performance within a maximum TDP power envelope of 15W. All of this makes the conga-TC87 an ideal solution for high-performance mobile systems.

**Further information**  
congatec  
[www.congatec.com](http://www.congatec.com)

### Resorbable and non-resorbable implants



The anchor set is designed for specifically for ease of use.

Degradable Solutions is an OEM/CM specialised company for the development and manufacture of resorbable and non-resorbable implants for the medical device market. Thanks to the CE marking and/or FDA submissions of more than 12 product families, the company guarantees its medtech customers a timely and cost-efficient development.

Degradable Solutions' interdisciplinary team of

highly specialised scientists and engineers will find the ideal solution for your customised product.

One of the latest products the company has developed and manufactured is the cillen ATM anchor. The PEEK anchor is intended to be used for the reattachment of soft tissue to bone using sutures, and is designed for craniomaxillofacial and hand/wrist indications.

The ATM anchor set consists of a PEEK anchor preloaded with a braided polyester suture with two attached needles (type HRX-13).

The ATM anchor is mounted on a single-use instrument, allowing easy and smooth insertion and fixation of the anchor into the bone. The suture-release mechanism of the implant holder ensures excellent handling.

Thanks to the radiopacity of the PEEK material chosen for the implant, the ATM anchor positioning can be seen in CT-scans and MRIs.

The non-resorbable suture guarantees permanent fixation of the soft tissue into the bone.

The set contains the appropriate drill for the preparation of the insertion site.

The ATM anchor set is CE marked. If you are interested in a future cooperation as a distributor for this product, contact Degradable Solutions at the address below.

**Further information**  
Degradable Solutions  
[info.ds@ch.sunstar.com](mailto:info.ds@ch.sunstar.com)

### Flexible, reliable circular connectors

REDEL is a brand of connectors dedicated to medical electronics. Initially created more than 25 years ago when LEMO introduced plastic connectors into the market, these connectors are entirely manufactured in the company's workshops, and are the result of its particular know-how in the moulding field.