

Next generation on-board display computers

maximatecc, headquartered in Milwaukee with operations in North America, Europe, South America and China, launches their CCpilot XM2 display computer, an upgraded version of the CCpilot XM. The XM was first introduced in 2011. With greatly improved computing and graphics performance, the XM2 offers OEMs and system developers a resourceful platform for advanced automations systems in the rough.

The company is also introducing the CCpilot VA, complementing the company's Vision line with a 7" display. Whereas the X-treme line of displays targets advanced computing applications in extreme operational contexts, the Vision line addresses basic vehicle control applications in the vehicle cab.

Users of industrial vehicles are increasingly expecting the same user experience in their work equipment, as they get with their smartphone or in their car. The response from maximatecc to this trend is to adapt the technologies from the smartphone and automotive markets into a product packaging for the industrial vehicle domain.

"Like has been the case in the automotive industry, we can project also for the industrial vehicle market, that most of the innovations will come in the domain of software, through soft products and apps that help improve the user experience, human-machine interaction, equipment utilization and life cycle profit," said Mats Kjellberg, director, Marketing and Sales. "For advanced industrial machinery, this is already the case, illustrated by the developments in e.g. forestry machines, advanced tractors and mining equipment."

The maximatecc CCpilot XM2 is a PC-based touch screen display computer for creating advanced human-machine-interface (HMI) systems, where controls, video, operator support and asset management functionalities are all integrated. With an Intel Atom E3826, dual core 1.46 GHz main central processing unit (CPU), the XM2 has greatly improved computing power compared to its



CCpilot XM2' – a PC-based touch screen display computer for creating advanced HMI systems where controls, video, operator support and asset management functionalities are integrated.

predecessor. In a number of benchmark tests it has proven to be two to three times faster than earlier versions

This computing performance together with the LinX Software Suite, an open software applications platform based on Qt, makes it possible to create advanced user interface systems and premium graphics with limited software engineering effort. Qt is a cross-platform, open source application framework, that is widely used for GUI development, making advanced features like transparency, shading and animations easy to implement.

"Through the industrial grade CPU, the CCpilot XM2 has a temperature range of -25 to +70 °C," said Kjellberg. "It can run at full CPU load over the entire range. Many on-board PCs and rugged tablets in the market are based on ATOM dual cores, such as the D2550, but are not industrial grade."

"Our new CCpilot XM is supplied to leading OEMs, serving in-mission critical applications in critical environments," said Kjellberg. "This calls for the highest quality level and in conclusion our CCpilot XM2 is an on-board PC, which delivers dependa-

ble and state-of-the-art performance in demanding applications, making machines smart, safe and productive."

There is a demand in the market for less advanced/costly equipment and maximatecc's response to this development is the CCpilot Vision line of displays. This product line is designed for in-cab HMI functions in standardized vehicle applications. The line is characterized by sleek enclosure designs making the Vision line displays easy to integrate in a dashboard.

Vision line displays are based on modern ARM computing cores and are freely programmable with a choice of powerful programming and configuration tools. The CCpilot Vision line contains three versions of products: the CCpilot VI with a 3''5 QVGA color display, the CCpilot VC with a 5'' WVGA color display with optional touch screen and the latest addition to the line the CCpilot VA, offering a 7'' WVGA color display with touch screen.



CCpilot VA - a freely programmable, ARM-based display computer with 7'' full-color TFT and touch screen.

The CCpilot VA also comes with LinX Software Suite – the same software application platform used on all maximatecc displays in the size range 5'' – 15''. This common software platform brings great benefits in

software development for OEMs and system developers that need different display screen sizes for different applications - it makes it possible to re-use software and reduces software maintenance cost.

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