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**Important Real-Time Clock (RTC) Component Revision  
Information for PHYTEC Single Board Computer (SBC)  
Modules: RTC-8583**

Dear customer,

EPSON has recently upgraded their Real-Time Clock (RTC) device product line. As a result the EPSON **RTC-8583** has been discontinued. This device has been implemented on the following PHYTEC Single Board Computer products and all their derivatives:

- KC-163 – kitCON-163
- KC-164 – kitCON-164
- KC-167 – kitCON-167
- KC-537 – kitCON-537
  
- MM-103 – miniMODUL-537
- MM-103-C09 – miniMODUL-509
- MM-209 – microMODUL-8051
- MM-310 – miniMODUL-167
- NM-164 – nanoMODUL-164
  
- phyPS-404 – COMBI modul-167
- phyPS-406 – COMBI modul-515

EPSON recommends the **RTC-8564** as a successor to the **RTC-8583**. The **RTC-8564** will be implemented on all the above mentioned PHYTEC products in place of the **RTC-8583**. Unfortunately this RTC is **neither pin nor software compatible** to the previous component. In addition the new component lacks internal RAM.

Because of this PHYTEC has performed a **redesign** of the impacted Single Board Computer products within the sphere of product maintenance. This redesign entails replicating the internal RAM present on the old RTC-8583 by integrating a serial **EEPROM** device, in so far as this type of memory device is not already present on the impacted module. The EEPROM device allows for non-volatile storage of operation and configuration data on the applicable Single Board Computer products as previously possible within the RAM of the battery buffered RTC.

In order to support you with the necessary modifications in terms of software, we will adapt the software drivers included with the applicable Single Board Computer product to the new components while maintaining the current call interface. If you are currently using our software drivers in your application, you merely have to integrate the new driver versions in your software.

In order to make this transition as simple as possible for you as well as to give you an appropriate preliminary adjustment period with the new version, we will ship the above listed Single Board Computer modules with the **RTC-8564JE** and an **EEPROM** exclusively as of **January 1st, 2004**. In the mean time both version of the modules can be purchased from PHYTEC.

Data sheets for the RTC-8564, the RTC-8583 and the CAT24WC32 or M24C32 EEPROM devices are available on our web side under:

<http://www.phytec.com/manuals/datasheets.htm>

Please contact PHYTEC should you have any questions or concerns regarding this RTC update.

Best regards,

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