Infineon`s Mobile Measurement Platform MD8710 for medical and other data acquisition and processing with USB & Bluetooth™ connectivity for convenient data exchange. This System on Chip comes with integrated peripherals for GPIO, PWM timers and several serial interfaces to meet a diversity of application`s requirements.

- Smart combination of functional blocks supports a variety of applications
- Single hardware with customized soft-/firmware enables several products
  - saves R&D time and cost
  - provides economy of scale for production
  - simplifies logistic efforts and flow

**Precision multichannel analog frontend for medical analysis**
Creation of synchronous stimuli & analysis within single device. Ideally suited for comprehensive impedance spectroscopy by the capability to link stimulus and measurement. High impedance inputs support typical medical measurement methods including photo sensors.

- Dual high resolution Input Channels ADCs
- Dual high resolution Output Channels DACs
- Four auxiliary voltage/current Inputs multiplexed to ADCs
- Programmable pre-filters & post-filters
- Four General Purpose Operation Amplifiers

**High performance standard CPU for the challenges of the future**
The ARM Cortex R4 core with up to 100MHz operating frequency provides enough headroom for the most demanding real-time applications. Ample on-chip memory and peripheral functions are a perfect fit for the requirements in many applications. A wide range of tools are compatible with the medical platform architecture.

- ARM Cortex R4 core
- Low Power stand-by mode
- Multilayer AMBA™ bus to all clients and I/O subsystems
- DMA engine to unload CPU from communication between bus clients
- Display engine supporting standard dot-matrix displays
- Evaluation-Kit with reference medical applications available

**Connectivity & Power Supply**

**Simple Connectivity via USB and Bluetooth™**
- Autonomous Bluetooth™ 2.1 subsystem including dedicated CPU
- Supports USB-OTG supplement Rev. 1.3
- API provides simple on chip command interface to reduce development efforts

**Integrated Power Management**
- Operations from rechargeable or disposable batteries
- Li-Ion Battery charger supporting a charging algorithms
- DC/DC up/down converters for core and I/O power supply for high power efficiency
- Low power sleep mode (< 30µA, RTC, wakeup)
- Voltage monitors for all power supplies

www.infineon.com/medical
Mobile Measurement Platform MD8710
One Device for Measurement and Medical Platform Development

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INFORMATION
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