Polycom® KIRK® DECT Application Module 6.0

Polycom proudly presents the innovative and high performance KIRK DECT Application Module 6.0 that allows you to add much more than outstanding wireless capability to your products.

Maximum Performance in Minimum Size
The KIRK DECT Application Module 6.0 is a wireless application module that supports voice, messaging and data. It comes in two versions: either engineered with wireless portable device functionality or with radio infrastructure functionality.

It is smaller than any existing DECT module that comprises the same features and comes complete with an EKGAP (Enhanced KIRK Generic Access Profile) Desktop Development Environment and pre-supplied software.

The complete software application of the module consists of the DECT protocol stack (running on the CR16), the DSP software (running on the Gen2DSP) as well as the user application (MMI) running on top of the DECT protocol stack. You have the option of developing your own MMI and DSP software units for your new wireless application products, or have a partner do all the development according to your specifications.

The module guarantees outstanding performance with high sensitivity and low power consumption. It offers you the possibility of developing a complete wireless communication solution ranging from personal wireless monitoring devices to alarm systems connected to machinery in a factory. The only limit is your imagination!

A Cost-Saving Solution for Your Wireless Product Development
The KIRK DECT Application Module 6.0 comes with onboard antennas and is fully radio approved, integrating the wireless module to a mainboard means that it is unnecessary to perform any further radio tests.

To save battery lifetime, the module is equipped with power supply management and prepared for transmit power management as well. The power supply, which ranges from 2.7V to 5.5V, makes the use of 3-cell or lithium ion batteries possible.

The EKGAP Desktop Development Environment is based purely on open source available software, which cuts development costs considerably, and can be used to program software for the module (apart from some low-level hardware drivers).

Save Time and Effort
The frontline wireless technologies developed by Polycom guarantee easy integration with your products, since it is possible to SMD-mount the module like any other SMD component. It requires no special handling.

Benefits
• Improve responsiveness and productivity of mobile workers dramatically
• Deliver high-quality and secure voice communications across all enterprise environments
• Leverage investment in circuit-switched and IP PBX features throughout the workplace
• Increase business efficiency by integrating with application systems and business processes
• Maximize employee availability using simple, reliable and durable devices
Key Features

- Smaller than any existing DECT module that comprises the same features
- EKGAP Desktop Development Environment and pre-supplied software
- Outstanding performance, high sensitivity and low power consumption
- Cost-saving features:
  - Fully radio approved component
  - Onboard antennas
  - EKGAP DDE based on open source software
- Easy to integrate (no need for special handling)
- RoHS compliant
- Mounted with the use of LLP (Leadless Lead frame Package)
- Dual antenna diversity functionality

Pre-supplied Software

The KIRK DECT Application Module 6.0 is shipped with default firmware, which provides default DECT behavior.

The EKGAP Desktop Development Environment is based purely on open source available software and can be used to program software for the module (apart from some lowlevel hardware drivers). It allows you to program additional behaviour, or completely replace the default firmware and develop your own application based on the Polycom KIRK DECT protocol stack.

The EKGAP DDE is integrated with the widely used Eclipse IDE and a cross compiler. It runs on a Windows or Linux PC and supports a number of novel debugging features:

- Trace & Replay: this feature allows the developer to make a detailed trace of a module execution scenario. This trace can be replayed in a simulation environment.
- Host Execution: the DECT protocol stack and application can be simulated in real time on a host processor.

Technical Info

The main parts of the KIRK DECT Application Module 6.0 are the fully integrated DECT radio transceiver and baseband processor.

The design adds Power Amplifier, SPDT switch, ceramic antennas and other components in order to achieve the desired functionality required for DECT/GAP.

Fully approved:

- Radio (TBR06): EN 301 406 V1.5.1 / FCC rules part 15/subpart D, RSS-213
- Safety: EN 60950-1:2006 / IECEE CB Scheme*
- EMC: EN 301 489-1 / En 301 489-6*
- Health: EN 50385:2002 (R&TTE, Article 3.1a, Council Recommendation 1999/519/EC)*
- Complies with GAP: EN 300 444
- Complies with DECT Ci: EN 300 175-1 to 8
- IC and UL (60950-1 CAN(CSA-CSS.s No. 60950-1-03)

*Type approval limited to the component supplied.