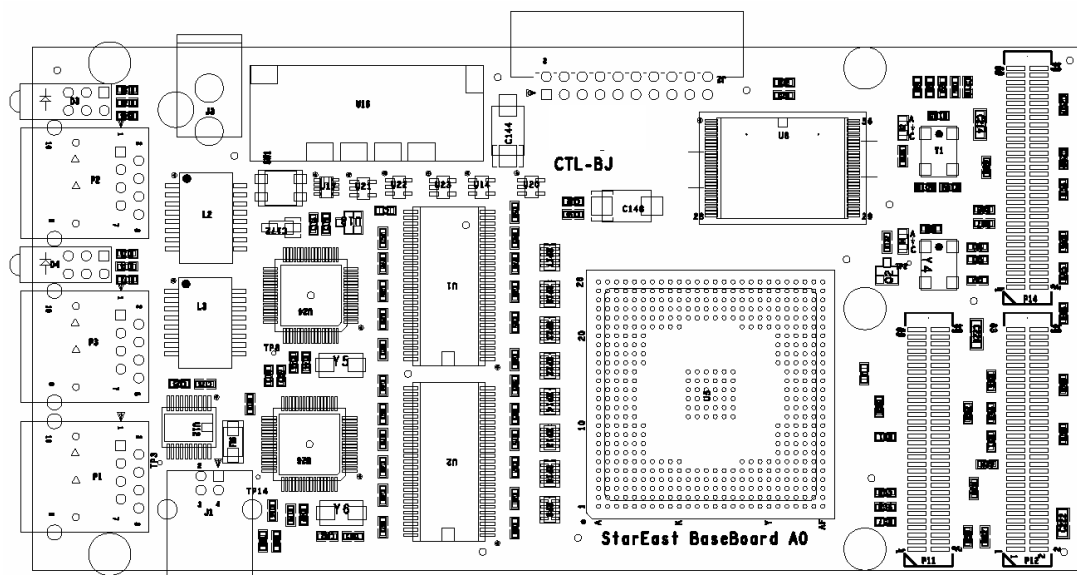# Introducing StarEast

StarEast: the Compact, Stackable, Multi-Radio, Multi-Channel Wireless Platform

StarEast is a stackable system with three kinds of modified PCI Mezzanine Cards. One is a baseboard, and the other two are adapter daughter cards to provide miniPCI and CardBus interfaces. The baseboard is based on an Intel® IXP425 network processor. It provides two fast Ethernet ports, one UART, and two mirror PMC PCI interfaces to connect the two daughter cards for miniPCI, CardBus or other customizing functions. To support large applications, the baseboard includes 133MHz, 256Mbytes of on-board SDRAM, and 32Mbytes of on-board Intel StrataFlash® memory. With two PMC2miniPCI daughter cards, StarEast supports four wireless Type IIIA miniPCI cards.

To facilitate the development, debug, and troubleshooting of application software, StarEast is compatible with Intel® IXP400 software. In addition, StarEast provides a software development tool chain based on open source Linux. Drivers for some commercial and internal wireless miniPCI cards are also provided.

Applications:

1. Radio Networking Research. Equipped with Intel Wireless PRO/2200 miniPCI card, StarEast enables the hot research on radio networks. The research focuses on improving the performance, ease of use and security of wireless networks. It explores the wireless RF characteristics to formalize self-managing, adaptive wireless network.
2. General research platform. Open source Linux and adequate adapter daughter cards let you use the cheap commercial peripheral miniPCI/CardBus/PCI cards to do research.
3. General industry, telecom controller. StarEast is a compact, standard size with low power and large memory size, and can be directly integrated into a user system as a control unit.

Features:

1. Control plane processor, IXP425@533MHz
2. Stackable PCI architecture
3. Two 10/100 base Ethernet
4. 256Mbytes SDRAM and 32Mbytes Flash
5. Up to four Type III MiniPCI slots and two Cardbus slots
6. Physical and electrical compatibility with PMC standard (IEEE1386/.1)
7. RS-232 interface and USB 1.1 (device only)
8. 12V DC input and on-board DC-DC provides 3.3V@10A
9. Red boot and open source Linux
10. Driver for Prism* II wireless card and Intel® Pro/Wireless 2200

Photo:

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*Other names and brands may be claimed as the property of others.