

## Fujitsu Microelectronics Launches Mobile WiMAX Chipsets for Mobile Devices

- Designed to fit in WiMAX modules sized 12 x 12mm, features standby current of less than 0.5mA -

Tokyo, June 16, 2008 - Fujitsu Microelectronics Limited (FML) announced today a new mobile WiMAX chipset optimized for mobile WiMAX devices such as smart phones and PDAs. Sample shipment will start in August 2008. The chipset includes a baseband LSI, the MB86K22; an RF LSI, the MB86K52; and a power management LSI, the MB39C316. The three devices are essential elements for competitive WiMAX modules. The chipset was designed so that the size of the WiMAX module will be 12x12mm. The standby current - which has a direct impact on battery life - will not exceed 0.5mA, facilitating the development of attractive mobile WiMAX terminals.

Next-generation Mobile WiMAX technology will be deployed in the United States, Europe, and Taiwan this year, and in Japan next year. The initial service will be through PC-based mobile broadband access, with simultaneous development of handsets, smart phones, PDAs, portable games and navigation systems.

The chipset's mature software stacks have been proven in the previous generation product, and the power management schemes have been optimized at the system level. These factors enable mobile WiMAX terminal manufacturers to focus on designing attractive user interfaces and service-oriented applications.

\*: FML's New Product

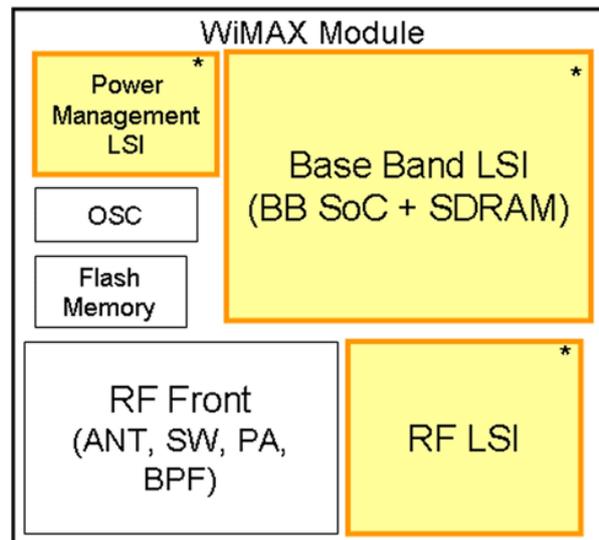


Figure 1: Chipset and WiMax module

"This highly integrated WiMAX chipset features the low power and small form factor essential to the development of attractive mobile WiMAX terminal products," said Makoto Awaga, General Manager of the Mobile Solution Business Group of Fujitsu Microelectronics Limited in Japan. "Fujitsu Microelectronics has assumed a global leadership position in moving WiMAX into deployment, and we are now ready to work with module vendors to meet market requirements."

### Chipset Key Features

The MB86K22 is a fully integrated baseband LSI built using Fujitsu Microelectronics' 65nm advanced CMOS low-leakage process technology. The operating power of the MB86K22 has been reduced by 36 percent from the previous generation. Power-gating technology shuts down the power supply in the unused blocks inside the device, so that

the entire mobile WiMAX module consumes only 0.5mA, thereby extending battery life.

The MB86K52 is an RF LSI built using CMOS process technology, which supports 2.3GHz, 2.5GHz, and 3.5GHz, almost all the frequencies set by the WiMAX Forum. This offers mobile WiMAX terminal manufacturers the ability to introduce global WiMAX devices. The MB86K52 also supports MIMO and beamforming technology, which is essential for mobile WiMAX Wave 2.

The MB39C316 power management LSI eliminates all the complex and time-consuming power management requirements by accommodating one cell battery. This design minimizes the peripheral components outside of the module. The MB39C316 controls and manages the module's power schemes at the system level, achieving the lowest power consumption at each operation.

### **Sample Price and Availability**

Samples of Fujitsu Microelectronics' Mobile WiMAX chipset will be available in August 2008.

Sample price is 8,000 JPY

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### **For more information**

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Fujitsu Microelectronics Mobile WiMAX Solutions

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### **About Fujitsu Microelectronics (FML)**

Fujitsu Microelectronics Limited designs and manufactures semiconductors, providing highly reliable, optimal solutions and support to meet the varying needs of its customers. Products and services include ASICs/COT, ASSPs, power management ICs, and flash microcontrollers, with wide-ranging expertise focusing on imaging, wireless, automotive and security applications. Fujitsu Microelectronics also drives power efficiency and environmental initiatives. Headquartered in Tokyo, Fujitsu Microelectronics Limited was established as a subsidiary of Fujitsu Limited on March 21, 2008. Through its global sales and development network, with sites in Japan and throughout Asia, Europe, and the Americas, Fujitsu Microelectronics offers semiconductor solutions to the global marketplace. For more information: <http://jp.fujitsu.com/group/fml/en/>

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## Key Specifications

### MB86K22 Baseband LSI

Bandwidth	3.5MHz, 5MHz, 7MHz, 10MHz, 20MHz (planned)
Modulation	64QAM / 16QAM / QPSK
FFT size	512/1024 FFT OFDMA
Antenna	2x2 STC/MIMO (MatrixA and MatrixB)
OS	Windows Mobile / Embedded Linux
Host interface	SDIO, SPI

### MB86K52 RF LSI

RF frequencies	2.295GHz - 2.405GHz / 2.491GHz - 2.695GHz / 3.295GHz – 3.620GHz
Bandwidth	3.5MHz, 5MHz, 7MHz, 10MHz, 20MHz
FFT size	512/1024 FFT OFDMA
Antenna	2x2 STC/MIMO (MatrixA and MatrixB)

### MB39C316 Power Management LSI

Power supply voltage	2.7V - 4.9V, 1 cell Lithium Ion battery
Output	3-channel DC/DC, 4-channel LDO
Sequence control	Power voltage activation/deactivation
Interface	I2C