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Exhibit B

Product Description



Exhibit B

Psion Dacom Gold Card NetGlobal 56K + 10/100 Cardbus

Product Description

The Gold Card NetGlobal 56K + 10/100 CardBus is a combined modem and ethernet card. It is constructed in a PC Card Type II CardBus format for use in a CardBus slot in an IBM or compatible laptop computer.

The modem part of the circuitry supports transmit data rates up to 33.6 kbit/s (ITU-T protocol V.34) and receive data rates up to 56 kbit/s (ITU-T protocol V.90). Control firmware is contained in 4Mb flash memory U4. Dialling and other modem functions are controlled by the receipt of Hayes AT commands from the PC.

The ethernet part of the circuit supports connection to both 10BaseT and 10BaseTX ethernet local area networks. The 10BaseT standard supports data rates up to 10 Mb/s and 100BaseTX supports data rates up to 100 MB/s.

The modem functionality is achieved using the Rockwell chipset RC56LD. This consists of two chips: modem data pump U8 and control processor U9. Control firmware is stored in 4Mb flash memory U11. Interfacing to the telephone network is provided by the linear opto-isolator U20 and associated circuitry.

The ethernet part of the circuitry is formed by the SMSC CardBus LAN ethernet controller U4 and driver chip U8. U4 provides all the digital ethernet functionality and U8 provides the drivers to convert the digital signals to a level compatible with the ethernet network. Transmit and receive signals are coupled to the exterior network via transformers mounted on chips T1 and T2. U4 also provides the cardbus interface for both the modem and the ethernet circuitry. An RJ45 connector is provided for connection to the ethernet network using standard unshielded twisted pair cabling.

To reduce electro-magnetic emissions the circuit is constructed using a 6 layer PCB with separate ground and power supply planes. The shield on the ethernet connector and the case metal work are connected to the ground plane, which is connected to the 0V on the laptop via a pin on the cardbus connector.