Wireless Game Link

Architecture

Game Link takes advantage of the half-duplex, token-ring protocol used by the multiboot cable. It implements a proprietary wireless protocol that is similar in timing to the wired one. This allows for operation that appears transparent to standard games. This protocol also transparently implements error correction and retransmission of lost or catastrophically corrupted packets.

The hardware is comprised of three chips, the transceiver chip CC2400, the baseband chip C8051F331 and the RF switch PE4259. The baseband chip is a masked programmed Micro Controller Unit (MCU) based around an ARM core, the MCU control the RF switch On/Off and the transceiver chip to receive and transmit valid signal so that achieve all communication with other Game Link Unit. Figure 1 shows a simple block diagram of the Game Link.

Game Link

Transceiver Chip

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RF switch

Figure 1