

TransferJet™ Wireless Data Transfer Technology

Simple Operation. Ultra-Fast Data Transfer. Safe Connection.

Simple Operation

Using TransferJet™ technology digital contents are automatically transferred as a download or streaming through close proximity or by simply touching two devices together. There is no need for complex setup, device pairing or the use of access points. Data transfer or media streaming can take place between two portable devices or between a portable device and stationary PC, peripheral or TV incorporated with TransferJet™ technology.

Ultra-fast Data Transfer

Seven times faster than Wi-Fi technology, TransferJet™ has a physical layer transmission rate of 560 Mbps with throughput of 375 Mbps. For example a one-hour TV program (170 MB in MPEG4) can be transferred in just a few seconds. TransferJet™ is capable of adjust-

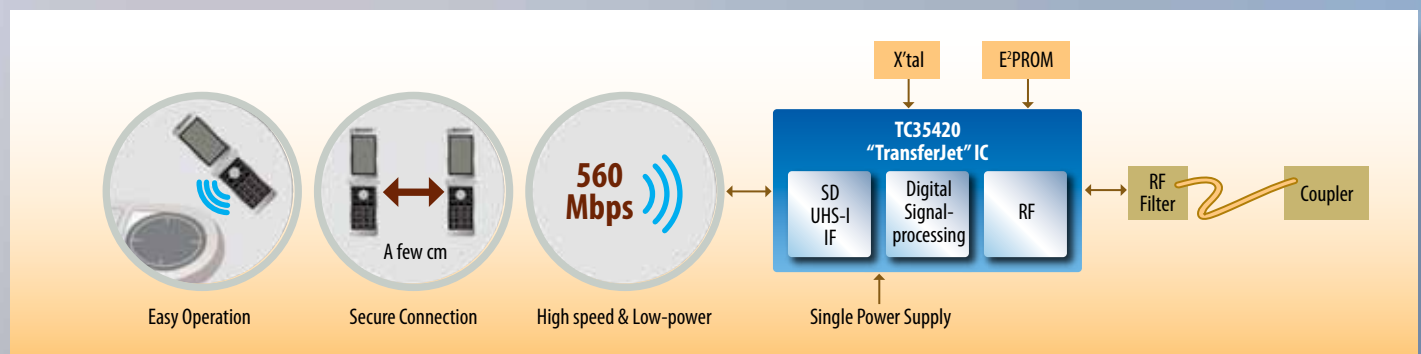
ing the appropriate data transmission rate according to the quality of the wireless medium and achieving the highest possible wireless transmission. TransferJet™ radiates very low energy radio waves due to its close proximity wireless communications and causes virtually no interference with other wireless systems and there is no impact on performance even if other TransferJet™ devices are operating in the vicinity.

Safe and Secure Connection

Short transmission distance is foolproof from hacking without the need for complex security measures or setup procedures. Users can register their electronic products to enable TransferJet™ to recognize and connect to specific devices only, preventing unintended and unauthorized access.

Toshiba TC35420 Wireless Communication LSI

The TC35420 supports the TransferJet™ standard for close proximity wireless transfer technology. This IC implements TransferJet™ functions with wireless, digital-signal-processing, host-interface, and memory-interface functions in a single chip using an RF-CMOS process.



TransferJet™ is a close proximity wireless transfer technology standard promoted by the TransferJet™ Consortium whose membership consists of 53 companies (as of September 2011), including Toshiba.

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TC35420 Highlights

Applications are media sharing, HD video streaming and data transfer.

Toshiba's cutting-edge RF-CMOS LSI technology enables incorporation of the RF circuit and RF switch for TransferJet™ in the wireless LSI for the first time in the industry.¹

It achieves receiving sensitivity of -78 dBm, the best performance in the industry², greatly surpassing the TransferJet™ specification.

The LSI is manufactured in a 65-nano-meter process, lowering the number of external RF circuits and peripheral components, and fits into one of the industry's most compact and low profile packages making it ideal for small and lightweight digital products.

¹First as of 11/2011

²Best performance as of 11/2011

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TC35420 Features

- ▶ One chip transceiver
- ▶ RF-CMOS process
- ▶ Built-in RF parts, RF switch, matching circuit and LNA (Low Noise Amplifier)
- ▶ Very high-speed host-interface
- ▶ SDIO UHS-I support
- ▶ Low-power consumption
- ▶ Single power supply
- ▶ Compact and low profile package: LGA81 4.0 mm x 4.0 mm x 0.5 mm

Block Diagram

