

## Product Brief

# MCCI USB DataPump<sup>®</sup> Embedded Host & On-The-Go Software

### USB Host Solutions

When the number of portable electronic devices in the market was small and storage costs were high, there was little incentive for direct, peripheral-to-peripheral communication. Now, however, there is a demand for communication from one portable device to another. Consumers do not want to have to route communications through a PC or a laptop, nor do they want to transport proprietary adapters.

Embedded host software is one of two USB responses to this problem. Instead of presenting the full USB host interface that is built into PCs, embedded host chips for mobile products provide hosting capability and are the right choice for restricted platform resources. MCCI USB DataPump Embedded Host software is the right development choice for these chip designs.

Augmenting the capabilities of Embedded Host, OTG (On-The-Go) provides the equivalent of a peer-to-peer USB environment. OTG's dual-role peripherals, are peripherals that can function either as hosts or as devices using HNP (Host Negotiation Protocol) and SRP (Session Request Protocol) across a micro-AB cable.

### Supported Silicon

The following chips and IP blocks are available today. Other blocks can be supported upon request or are under development.

- ‡ Synopsys DesignWare HS OTG core
- ‡ Mentor Graphics Inventra High-Speed On-The-Go core (MUSBMHDRC)
- ‡ Chipidea High-Speed OTG core
- ‡ Epson S1R72005
- ‡ NXP 1761 High-Speed OTG controller

### MCCI's USB Host Solutions

MCCI USB DataPump On-The-Go stack extends the proven MCCI USB DataPump device firmware. The stack includes an HCD (Host Controller Driver), DCD (Device Controller Driver), and hub support.

Software blocks include a keyboard-only HID (Human Interface Device) class driver, a HID parser, an MSC (Mass Storage Class) driver, ACM (Abstract Control Model) and WMC (Wireless Mobile Communication) support, as well as an OBEX (Object Exchange) function driver.

MCCI can write a wrapper layer for your developers to use when they integrate MCCI Embedded Host code or OTG code into your system, or MCCI can integrate the code for you.

### Features and Value-Add

MCCI's solution provides additional value beyond an implementation of the USB specification:

- ‡ Designed from the beginning for cell phones and other complex, embedded products
- ‡ Built on the industry-proven MCCI USB DataPump device stack, greatly reducing risk
- ‡ Extensively configurable, from memory consumption to feature-set
- ‡ Optimized for lowered power requirements and longer battery life
- ‡ Hardware, platform, and operating system independent
- ‡ One of very few complete, market-tested embedded host stacks available today
- ‡ An end-to-end solution, tailoring support options to meet customer needs

## Contents

- USB Host Solutions
- Supported Silicon
- MCCI's USB Host Solutions
- Features and Value-Add
- MCCI Embedded Host and OTG Architecture Diagram
- Standards and Protocol Compliance

*Superior software for embedded USB hosts and dual-role USB peripherals*

MCCI Corporation  
3520 Krums Corners Rd.  
Ithaca, NY 14850  
USA

Tel: +1-607-277-1029  
Fax: +1-607-277-6844

sales@mcci.com

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