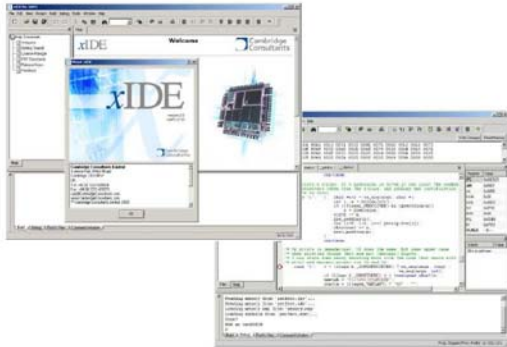


xIDE for Interface Express™



Sophisticated Bluetooth® products require sophisticated Bluetooth® software. This can involve processing data at higher rates, often supporting multiple Bluetooth® profiles. This has normally required running the Bluetooth® protocol stack and application software on a host processor talking over an HCI link to a Bluetooth® device.

Cambridge Consultants now offer an integrated software development environment (xIDE) that enables developers to integrate our fully qualified, easy-to-use Bluetooth® profile library (Interface Express®) and protocol stack (BlueStack®) along with their own applications directly onto Cambridge Silicon Radio's (CSR's) BlueCore™ devices. This tool enables developers to achieve full-rate Bluetooth® data transfer with an on-chip application, enabling sophisticated host-less application development for CSR's BlueCore™ chip. By increasing the performance of the on-chip software, developers can reduce the cost of their Bluetooth® enabled products, reduce the time to get products to market and significantly increase their competitiveness.

Since being spun-out of Cambridge Consultants in 1999, CSR have become the market leading Bluetooth® chip supplier. Cambridge Consultants originally developed the XAP2 RISC microprocessor used within CSR's family of BlueCore™ devices, so it is not surprising that we have worked closely together over the last six years. The latest output of this collaboration is xIDE for Interface Express™ – a toolkit that enables developers to fully access the processing power within BlueCore™

Benefits of using this toolset

The xIDE for Interface Express™ toolkit provides the following benefits to developers:

- Powerful integrated development environment that allows editing, compilation, build and debug from within a single tool, making development more productive
- Source code and build files managed using a project filing system that will be familiar to users of similar integrated development environments, helping developers to get up to speed quickly
- The developed software runs natively on the XAP2 microprocessor within BlueCore™, making more power available to your application
 - data transfer at full Bluetooth® data rate of >700kbit/s
 - full, seven slave, piconet capability
- Bluetooth® qualified software with a rich array of profiles, enables the development of sophisticated products with simplified qualification
- Reference applications provide guidance to developers, simplifying development and accelerating projects



Simplified integration

The toolkit provides reference applications to enable developers to get started quickly. Examples include:

- CTP access point
- Printer interface
- In-car Hands-free with phonebook download
- Advanced headset
- Phone access data acquisition and control
- Storage device access
- Serial Port remote control and data transfer

Software with an impressive pedigree

Cambridge Consultants has been developing standards-based on-chip radio software for many years. As a member of the Bluetooth® Special Interest Group, Cambridge Consultants has been involved from the early days of the development of the Bluetooth® standard. Today, our software forms the basis of over 65% of all qualified Bluetooth® designs including mobile telephones from Samsung, NEC and Alcatel. Since forming our 'spin-out' company, Cambridge Silicon Radio (CSR), the industry leading single-chip Bluetooth® vendor, we have continued to develop and extend our Bluetooth® software offering, enabling us to offer complete turnkey Bluetooth® development.

Our qualified Bluetooth® profiles include:

AVRCP	A2DP	BIP
BPP	CTP	DUN
FAX	FTP	GAP
GOEP	HFP	HCRP
HSP	HID	ICP
OPP	PAN	SAP
SDAP	SPP	SYN

Applications can be developed as completely on-chip or mostly on chip. In the completely on-chip case, no external processor is used and the entire application resides on the BlueCore™ device. In the mostly on-chip case, a simple UART protocol can be used to interface to other devices, where these devices need to have no understanding of Bluetooth® protocol operation or specification.

Either way, the development of high-performance on chip software will shorten development times, reduce product costs and increase the competitiveness of your Bluetooth® enabled products.

Technical Specifications

Operating system required:	Windows 2000 Windows XP
Processor Requirements:	Min: Pentium 3 1000MHz Rec: Pentium 4 1800MHz
Memory Requirements:	Min: 256Mbyte Rec: 512Mbyte

Interface Requirements: Parallel port, used as SPI interface to BlueCore™

Licensing: Per seat FlexLM licence
Provided as single machine licences or Floating Licences via FlexLM Licence server

Debugging Hardware: Requires CSR Casira endpoint or equivalent hardware with SPI Interface access to BlueCore™ device



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