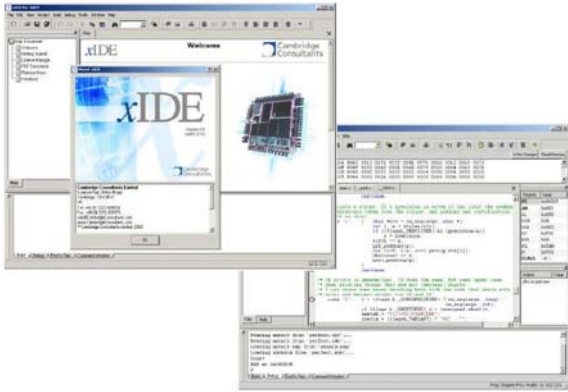


xIDE for Interface Express™



Today's Bluetooth® products require complex software to support sophisticated User Interfaces and multiple Bluetooth profiles together with features such as high-fidelity audio processing. Normally this would involve running the application software and part of the Bluetooth protocol stack on a separate host processor, talking over a 'host-controller interface' link to the Bluetooth device.

Cambridge Consultants' xIDE for Interface Express toolkit enables developers to produce high-performance, feature-rich products using Cambridge Silicon Radio's (CSR) BlueCore™ chip alone, reducing significantly the cost and time to market of Bluetooth enabled products.

The integrated software development environment (xIDE) enables developers to integrate our v2.1+EDR+CSA1 qualified, easy-to-use Bluetooth profile library and protocol stack with their own applications directly on to CSR's BlueCore™ devices. The toolkit also includes additional libraries providing comprehensive support for MMI, LCD display, keyboard scanning and other peripheral drivers including support of BlueCore's built-in DSP for providing features such as high quality audio.

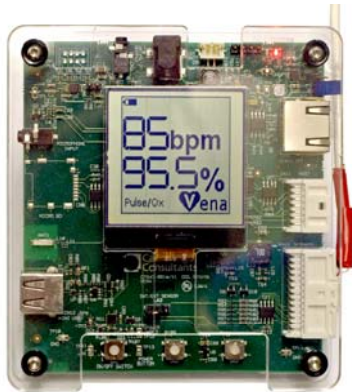
Since being spun-out of Cambridge Consultants in 1999, CSR has become the market leading Bluetooth chip supplier. Cambridge Consultants developed the XAP2 RISC microprocessor used within CSR's family of BlueCore devices, so it is not surprising that we have worked closely together over the last ten years. 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 toolkit

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

- Application software runs natively on the XAP2 microprocessor within BlueCore, making more processing power and RAM available to your application
- Bluetooth qualified software with a rich array of profiles, enables the development of sophisticated products with simplified qualification
- Comprehensive application support library including:
 - MMI widgets for menus icons etc.
 - Colour and monochrome display drivers
 - Keypad scanner
 - Font painter
 - USB, UART, SPI & PIO interfaces
- Interface to on-chip Kalimba™ DSP, supporting all popular audio codecs
- Application code may be prototyped on a Microsoft® Windows PC, enabling development to proceed prior to availability of hardware
- Reference applications provide guidance to developers, simplifying development and accelerating projects
- 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



Simplified integration

The toolkit also provides example applications to enable developers to get started quickly, including:

- Stereo headphones
- Hands-free Car Kit
- Cordless Telephony access point
- Printer interface
- Storage device access
- Serial Port remote control and data transfer

Add-ons expand capabilities



With the addition of our [Vena](#) platform, the toolkit can also be used to build Continua Certified™ Health and Fitness devices and device managers.



Our [catchNet](#) platform allows the toolkit to be used to produce highly embedded internet-enabled devices, using Mobile phones as the Internet gateway.

Bluetooth SIG Qualified

Interface Express is qualified as a tested component to Core Specification v2.1+EDR including being the first component qualified

to the Core Spec Addendum 1 for enhanced L2CAP.

Our portfolio of Bluetooth software was also first to qualify for MCAP and Health Device Profile.

Our qualified Bluetooth profiles include:

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

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, we have been involved from the early days of the development of the Bluetooth standard.

We are extremely proud that part of our Bluetooth software is used in all of CSR's Bluetooth products. We have independently continued to develop and extend our offering, enabling us to offer complete turnkey Bluetooth development to our customers.

xIDE for Interface Express has been used to develop a wide variety of Bluetooth products. Some examples are:



- Sony Ericsson Media Viewer
- Clipcomm CTP access point



- PlanOn's PRINTSTIK pocket-sized printer
- SMART Interactive Whiteboard Bluetooth accessory

Technical Specifications for xIDE toolset

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

* HDP is available with our Vena add-on.

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