

# Codenomicon Robustness Tester for Bluetooth® Technology

Improve the Stability and Quality of Your Bluctooth Wireless Implementations

# Codenomicon Robustness Tester for *Bluetooth* Technology

# Robustness Testing:

- Improves stability and quality
- Reduces customerreported defects
- Reduces support and maintenance costs
- Protects your product from external attacks
- Benefits your corporate brand
- Is encouraged by the Bluetooth SIG
- Is used by developers and test engineers

If you are a *Bluetooth* products reseller (such as mobile phone network operator) the robustness testing process enables you to find problems before your customers do.

# Swift & Sure Development Shortens Time-to-Market

ast-paced, complex and continual changes in the wireless technology product arena demands a short development cycle that must not sacrifice interoperability and in-field performance.

The longer it takes to find *Bluetooth* bugs, the more costly they become to fix and the more they delay product release. The longer it takes to bring a product to mar-

ket, the fewer potential sales are possible before the end of sales life.

#### The Codenomicon Robustness Tester for Bluetooth Technology takes

predeployment product performance simulation to new levels, and exposes more bugs earlier in the development cycle. It speeds time-to-market and increases sales opportunities.

It is the perfect companion to Frontline's **FTS4BT**<sup>™</sup> Bluetooth protocol analyzer. FTS4BT provides live



Elimination of bugs is more expensive the later they are discovered.

synchronized air and HCI sniffing from multiple points of observation to debug, test, and verify—FAST!

These two testing products combined allow developers and test engineers to find and fix *Bluetooth* bugs fast and bring products to market sooner.

# Complete Test Suites

A host of suites are included to ensure your Bluetooth technology application will be rigorously tested and ready for deployment. These profiles are currently provided, with more on the way:

A2DP	Advanced Audio Distribution
AVRCP	Audio/Video Remote Control Profile
BIP	Basic Imaging Profile
BNEP	Bluetooth Network Encapsulation Protocol
BPP	Basic Printing Profile
DUN	Dial Up Networking
FAX	Fax Profile
FTP	File Transfer Profile
HFP	Hands Free Profile
HSP	Headset Profile
IrMCSync	Infrared Mobile Computing (with sync engine)
L2CAP	Logical Link Control and Adaptation Layer Protocol
RFCOMM	Radio Frequency Communication
SDP	Service Discovery Protocol
OPP	Object Push Profile



# Improve *Bluetooth* Product Reliability

Due to the inherent nature of development in the wireless personal area network arena, a wide variety of interacting products and performance situations are possible. In order to ensure interoperability and crash-proof performance, *Bluetooth* technology devices must not only meet the measure of specifications from the SIG, but stand up to increasingly complex user sce-

narios. You know your product is good. But how will it measure up in the field when it has to interact with all the other products? And what happens when it is bombarded with data mangled by RF interference or some malicious hacker tries to purposefully cause disruption?

#### The Codenomicon Robustness Tester for Bluetooth Technology verifies the capability of Bluetooth

implementations to withstand invalid and malformatted wireless traffic. The tests result in improved product stability and security, which protects not only your end-users, but also your corporate brand. FOP Use by Software Vendors Device Manufacturers Chip and Module Makers Mobile Phone Network Operators Test Labs Consultants

**Includes This Finger-**

Sized Bluetooth

This tool finds bugs faster by systematically and relentlessly trying to break the implementation under test. Over a dozen profile test suites are currently available. Each suite contains thousands or tens of thousands of ready-made test cases, which means no time needs to be invested in initial test design and that testing can begin right away. The range of profiles and test suites will steadily grow to cover all widely deployed *Bluetooth* protocols and profiles.

Used in conjunction with Frontline's **FTS4BT**, the world's only v2.0+EDR *Bluetooth* protocol analyzer, the Codenomicon Robustness Tester provides a means to attain a new level of product stability, robustness, and confidence regarding software and hardware functionality in the field and in the marketplace. Contact us now for more information.

## About Codenomicon Oy

Based in Oulu, Finland, Codenomicon is a leading developer of state-of-the-art software testing tools. Their products test device and system stability and reliability to increase robustness before

customer purchase. The company's products are unparalleled in protocol coverage and test case generation efficiency. www.codenomicon.com

## The Fronfline Edge

### Outstanding Technical Support

Whether you need help using a basic product feature, want Frontline's explanation of the protocol stack, or have a question on using FrameDecoder to write a decode, you can be assured of a response that is friendly, thorough, and timely.

### Trusted *Bluetooth* Expertise

The Bluetooth SIG (the governing body of *Bluetooth*) has selected Frontline to provide worldwide technical support for the SIG's Profile Tuning System (PTS) test tool. PTS is the corner-



stone of the Bluetooth product qualification program. We've earned the SIGs trust through our demonstrated commitment to *Bluetooth* and our reputation for providing a great product at a fair price, backed by outstanding support.

#### Unequaled Protocol Analysis Experience

With over seventeen years of experience developing protocol analysis tools, and an installed base of over 40,000 analyzers, Frontline is a proven protocol analyzer industry leader. Our growing family of Frontline Test System<sup>®</sup> (FTS<sup>®</sup>) protocol analyzers incorporates a common user interface and the FrameDecoder protocol-decoding engine. FTS analyzers support serial, Ethernet, Bluetooth, USB, ZigBee<sup>™</sup> and numerous industrial protocols and buses such as Modbus, DH+, and DeviceNet. FTS tools debug, test & verify-FAST!

#### Free Premium Maintenance

Included with purchase, customers receive one year of software bug fixes, upgrades, and unlimited support for the life of the license. At the end of the service agreement, extended maintenance is available for a reasonable price. *Bluetooth* technology

moves fast with Frontline, so can you.



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