HSU

High Speed UART Protocol Analyzer

The Frontline HSU Protocol Analyzer includes powerful Frontline software and the High Speed UART hardware interface.

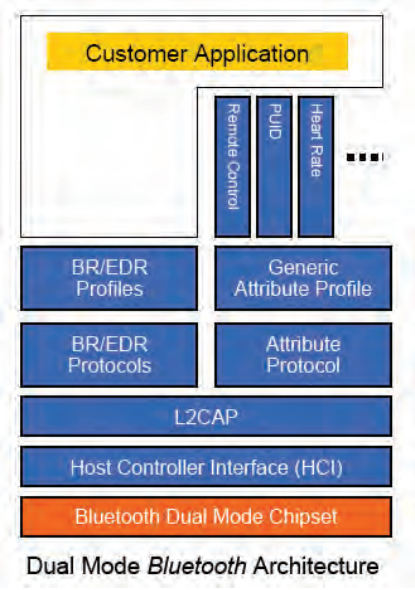
Key Features and Benefits

- **Data You Can Trust**
  Non-intrusive analysis provides uncontaminated views of the HCI data you need
- **Synced with Bluetooth**
  ProbeSync ensures that *Bluetooth* data captured by the BPA 600 is in lock step with HSU data
- **Compact footprint delivers big features** to developers of *Bluetooth* technologies
- **USB-powered** means excellent portability and simpler device setup - just plug into the USB port and go!
- **Comprehensive Protocol Analysis**
  Can be used in conjunction with other Frontline devices for interoperability analysis over multiple bus types
- Features direct TTL connection to HCI UART transport layer
- **Full Serial Protocol Support**
  Coverage is complete - WCI-2, H4, H5 and BCSP protocols are supported
- **Easy SSP Decryption**
  Frontline HSU sends the link key directly to the ComProbe software for hassle-free SSP decryption

The Frontline HSU Protocol Analyzer allows developers and engineers to easily capture and decode high speed serial UART data. This tool is essential for Bluetooth® product developers who wish to debug elusive HCI communication issues between a *Bluetooth* Host and Controller.

Significantly Reduce Debugging Time with ProbeSync™

Frontline's ProbeSync enables two or more analyzers to share a common clock - when using the Frontline HSU with the BPA® 600 Dual Mode *Bluetooth* Protocol Analyzer, HCI andover-the-air *Bluetooth* data are displayed in perfect time stamp synchronization. Once captured, all packets can be viewed, debugged and target-searched for errors with the powerful and mature Frontline software. Showing HCI and over-the-air packets in tight synchronization means that the ComProbe HSU can significantly reduce the time you spend debugging *Bluetooth* HCI protocols and timing issues, and help to bring your *Bluetooth* product to market faster.



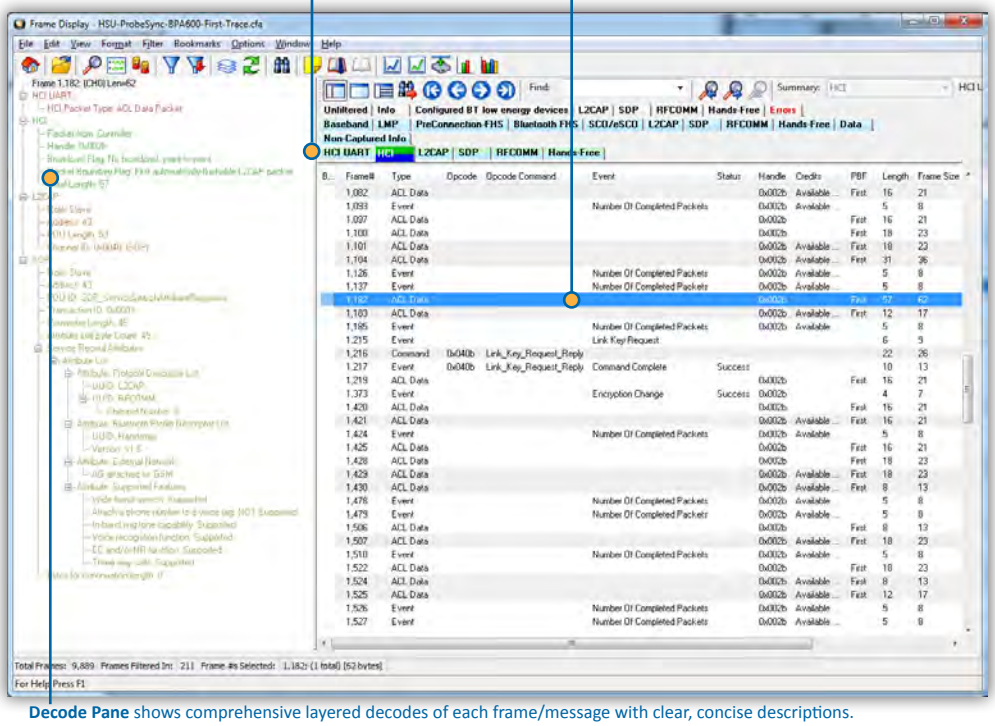
Dual Mode *Bluetooth* Architecture

Portable and Powerful HCI Debugging

Powered by USB, this small form-factor analyzer provides non-intrusive analysis without any compromises; the Frontline HSU supports data rates up to 8 Mbps and supports *Bluetooth* HCI protocols including H4, H5 and BCSP. The Frontline HSU provides developers and engineers with one compact and portable point of access to high speed serial communications between chip sets. This analyzer provides a non-intrusive window into native-format bus performance and command and response tokens, and allows *Bluetooth* developers to capture *Bluetooth* data as it's transported over the HCI UART bus.

Technology Tabs afford easy access to HSU profiles and protocols.

Summary Pane displays a one line overview of each data frame/ message. Click on any line to reveal detail in mutiple panes below.



Decode Pane shows comprehensive layered decodes of each frame/message with clear, concise descriptions.

TELEDYNE LECROY
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Specifications

- **Dimensions:**
  2.75 x 2.0 x 0.9 inches
- **Power:**
  USB Powered
- **Accessories:**
  6' Shielded High-Speed USB cable

  Connection Cable:

  22-gauge test wires with 0.025" square sockets (total of 9, various colors)

  Male RJ-45 socket ProbeSync connector

  9 high-quality miniature test clips that allow connection

- **Maximum Operating Speed (any mode)**
  100 MHz
- **Maximum Rate of Data Capture**
  6Mbps
- **TTL Level Inputs**
  High level (logic 1): +2V to +5V
  Low level (logic 0): 0V to +0.8V
- **Logs data from 8 digital channels**
- **Sample Data Rate**
  100 Mbps
- **The HCI sniffer displays and decodes all the protocol layers all the way through the profile. The profile list includes:**

L2CAP	HFP
SDP	HID
RFCOMM	HSP
OBEX	HCRP
OPP	SAP
FTP	MAP
BIP	HDP
SMP	ATT

The Frontline HSU Hardware Interface

The Frontline HSU Protocol Analyzer includes the portable and robust high speed UART hardware interface, which supports connectivity between *Bluetooth* Hosts and Controllers. The product is powered by USB, and includes 22 gauge test wires with high quality miniature test clips that allow users to easily connect to narrow pitch components.

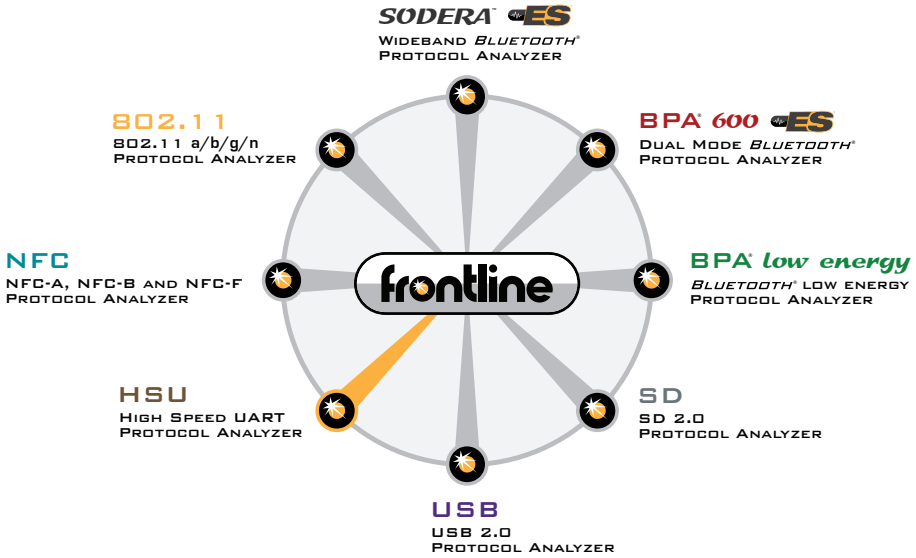
The Frontline HSU interface is one member of an extensive arsenal of technology-specific hardware interfaces, all functioning with the powerful ComProbe software. This modular approach allows greater flexibility in protocol analysis and debugging, and provides comprehensive coexistence views over virtually any combination of protocols.

Supported Configurations

- OS Supported: Win 7 and Win 8
- USB Port: USB 2.0 or USB 3.0 High-Speed

Minimum System Requirements

- Processor: Core i5 processor at 2.7 GHz
- RAM: 4 GB
- Free Hard Disk Space: 20 GB



The Frontline Modular Approach

Frontline software is at the core of Frontline protocol analysis, allowing technology-specific hardware interfaces to work individually or in combination with other hardware interfaces. This modular approach gives the developer or analyst the widest possible range of scenarios for debugging complex communications.