FreeMASTER is a user-friendly real-time debug monitor and data visualization tool for application development and information management, ideal for automotive, industrial or consumer applications.

OVERVIEW

FreeMASTER is a user-friendly real-time debug monitor and data visualization tool for application development and information management. This tool supports non-intrusive variable monitoring on a running system. Allows the data from multiple variables to be viewed in an oscilloscope-like display or in a common text format.

The HTML-based data visualization area is extensible. The user can provide an arbitrary collection of ActiveX-based instrumentation gauges, dials, knobs and sliders to create custom visual dashboards as complex or elegant as desired.

FreeMASTER is ideal for automotive, industrial or consumer applications.

CAPABILITIES

- **Real-time monitoring**—Watch multiple variables at individual sampling rates and chart up to eight in the oscilloscope view. Use the high-speed recorder (on target) for rapid processing.
- **Real-time control**—Modify variables real-time. Send commands to the hardware, along with start and stop.
- **Data visualization**—Enables the use of third-party instrumentation components inserted into the HTML code as embedded ActiveX objects. Allows the creation of user-friendly displays of complex real-time data dashboards.
- **Information management**—The HTML-based visualization area supports any HTML-based content. Use it with the Project Tree navigation pane to present demos, product information, collateral or any project-related data.
APPLICATIONS

- FreeMASTER is extremely useful for software development that requires real-time data access
- Motor control software
- Sensor applications
- Real-time data visualization of any system output
- Visualizing complex data (user-friendly interface design)
- Wireless charging control and configuring GUI
- Touch-sensing applications
- Various demo applications

FEATURES

- Graphical environment
- Easy-to-understand navigation
- Simple RS232 native connection and other options possible on selected platforms (BDM, JTAG, CAN, LIN, USB, ...)
- Real-time access to embedded-side C variables
- Visualization of real-time data in the scope window
- Acquisition of fast data changes using the on-target recorder
- Built-in support for standard variable data types (integer, floating point, bit fields)
- Value interpretation using custom defined text messages
- Several built-in transformations for real type variables
- Automatic C-application variable extraction from compiler output files (ELF/DWARF1/2/4, Text-based map files, ...)
- Demo mode with password protection support
- HTML-based description or navigation pages, Support for HTML5 controls and rich graphical content
- Active content stored in target flash memory
- ActiveX interface to enable VBScript or JScript control over embedded applications
- Remote communication server enabling a connection to target board over a network, including the Internet
- Communication diagnostics and logging
- Pipes = loss-less streaming protocol for character or binary I/O

PLATFORM AND CONNECTION SUPPORT

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<tr>
<th>MCU Families</th>
<th>No Driver</th>
<th>Target Driver Required</th>
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<tr>
<td></td>
<td>BDM</td>
<td>Packet-Driven BDM</td>
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