# SL1487A CCS Charging Protocol Trace Viewer

CPT Software Update - CCS Charging Protocol Trace Viewer V1.2.0

Release Version:	V1.2.0
Release Date:	3/11/2024
Release Type:	Minor Update Release
Operating System:	Windows 10/11 (64Bit)
System Requirements:	<ul> <li>Any modern 64-bit AMD64/x86-64 or 32-bit x86 processor</li> <li>500 MB available RAM. Larger capture files require more RAM</li> <li>500 MB available disk space. Capture files require additional disk space</li> <li>Any modern display. 1280 × 1024 or higher resolution is recommended</li> <li>A supported network card for capturing</li> </ul>
Hardware:	SL1556A CCS Charging Protocol Tracer (optional)
License:	Node-locked or floating license

### Benefits

The SL1487A CCS Charging Protocol Trace Viewer (CPT) enables users to decode Combined Charging System (CCS) communication protocols used for charging. This includes the DIN 70121 and ISO 15118 for vehicle-to-grid (V2G) communication, but also other useful messages used on the Hardware abstraction layer (HAL). The Homeplug AV Extended Dissector also adds additional information about vendor-specific messages, which are useful when initiating a charging session. In addition, the software can be used together with Wireshark, a packet analyzing tool, for easy and detailed tracking of communication between the electric vehicle (EV) and electric vehicle supply equipment (EVSE).





# **New Features**

#### CPT Decoder V1.0.4

- Fixed ISO 15118-20 WPT and ACDP message decoder
- Fixed invalid DIN 70121 response decoding

# CPT Plugin V1.2.0

- Homeplug AV Extended Decoder was added
  - o Information for VS\_HOST\_ACTION.REQ (Qualcomm)
  - o Information for VS\_GET\_PWM\_STATS.IND (Vertexcom)
  - o Information for VS\_ATTEN\_CHAR (Qualcomm)



# CPT Software Update - CCS Charging Protocol Trace Viewer V1.1.0

Release Version:	V1.1.0
Release Date:	12/15/2023
Release Type:	Minor Update Release
Operating System:	Windows 10/11 (64Bit)
System Requirements:	<ul> <li>Any modern 64-bit AMD64/x86-64 or 32-bit x86 processor</li> <li>500 MB available RAM. Larger capture files require more RAM</li> <li>500 MB available disk space. Capture files require additional disk space</li> <li>Any modern display. 1280 × 1024 or higher resolution is recommended</li> <li>A supported network card for capturing</li> </ul>
Hardware:	SL1556A CCS Charging Protocol Tracer (optional)
License:	Node-locked or floating license

### **New Features**

#### CPT Decoder V1.0.3

- Fixed automatic selection of EXI decoder
- Updated dependencies

### Wireshark Plugins

- Support for Wireshark 4.2.x (with this release support for Wireshark 4.0.x is removed)

### CPT Plugin V1.1.0

- Support for dark mode
- Fixed a bug that caused a crash of Wireshark when multiple windows of Wireshark were open and one got closed while both displayed packets that needed the CPT Decoder.
- Fixed a bug that could occur after an installation attempt when the "preferences" file for the Wireshark configs was missing under "Appdata/Roaming/Wireshark".



# CPT Software Update – CCS Charging Protocol Trace Viewer V1.0.2

Release Version:	V1.0.2
Release Date:	11/24/2023
Release Type:	Minor Update Release
Operating System:	Windows 10/11 (64Bit)
System Requirements:	<ul> <li>Any modern 64-bit AMD64/x86-64 or 32-bit x86 processor</li> <li>500 MB available RAM. Larger capture files require more RAM</li> <li>500 MB available disk space. Capture files require additional disk space</li> <li>Any modern display. 1280 × 1024 or higher resolution is recommended</li> <li>A supported network card for capturing</li> </ul>
Hardware:	SL1556A CCS Charging Protocol Tracer (optional)
License:	Node-locked or floating license

### Resolved Issues

### CPT Decoder V1.0.2

- Fixed incorrect eligibility date

### Wireshark Plugins

CPT Plugin V1.0.2

- Improved System stability
- Disabled Auto-Update for Wireshark on installation to prevent unwanted incompatibility with the build plugins.



# CPT Software Update - CCS Charging Protocol Trace Viewer V1.0.1

Release Version:	V1.0.1
Release Date:	7/24/2023
Release Type:	Major Release
Operating System:	Windows 10/11 (64Bit)
System Requirements:	<ul> <li>Any modern 64-bit AMD64/x86-64 or 32-bit x86 processor</li> <li>500 MB available RAM. Larger capture files require more RAM</li> <li>500 MB available disk space. Capture files require additional disk space</li> <li>Any modern display. 1280 × 1024 or higher resolution is recommended</li> <li>A supported network card for capturing</li> </ul>
Hardware:	SL1556A CCS Charging Protocol Tracer (optional)
License:	Node-locked or floating license

### **New Features**

#### **CPT Decoder**

- Initial Release
- Supports direct decoding for HAL and V2G messages
- Supports WebSocket service for decoding HAL and V2G messages

### Wireshark Plugins

### CPT Plugin

- Initial Release
- Decoding support for V2G protocol
- Decoding support for HAL protocol

### TLS Session Master Key

- Initial Release
- Supports the following keys:
  - o RSA Session-ID
  - o CLIENT\_RANDOM: 48 bytes for the master secret, encoded as 96 hexadecimal characters (for SSL 3.0, TLS 1.0, 1.1, and 1.2)



- o CLIENT\_EARLY\_TRAFFIC\_SECRET: the hex-encoded early traffic secret for the client side (for TLS 1.3)
- o CLIENT\_HANDSHAKE\_TRAFFIC\_SECRET: the hex-encoded handshake traffic secret for the client side (for TLS 1.3)
- SERVER\_HANDSHAKE\_TRAFFIC\_SECRET: the hex-encoded handshake traffic secret for the server side (for TLS 1.3)
- o CLIENT\_TRAFFIC\_SECRET\_0: the first hex-encoded application traffic secret for the client side (for TLS 1.3)
- o SERVER\_TRAFFIC\_SECRET\_0: the first hex-encoded application traffic secret for the server side (for TLS 1.3)
- o EARLY\_EXPORTER\_SECRET: the hex-encoded early exporter secret (for TLS 1.3).
- o EXPORTER\_SECRET: the hex-encoded exporter secret (for TLS 1.3)