Telit WHQL Windows 11 Drivers Installer

Software User Guide

1VV0301779 Rev 4
2023-10-27
Released
Public

Technical Documentation



Contents

1 **Applicability Table** 3
2 **Introduction** 4
2.1 Scope 4
2.2 Audience 4
2.3 Contact Information, Support 4
2.4 Conventions 4
2.5 Terms and conditions 5
2.6 Disclaimer 5
3 **Telit WHQL Windows 11 Drivers Installer** 6
3.1 Installer Details 6
3.2 How to Use the Installer 6
Attended Installation 6
Unattended Installation 6
USB Compositions with Network Interface 6
Avoid COM Port Proliferation 6
4 **Supported Modems by Product ID** 8
4.1 Table of Product IDs 8
5 **Features** 11
6 **Troubleshooting** 12
6.1 Debug information retrieval 12
7 **Acronyms and Abbreviations** 13
8 **Related Documents** 14
9 **Document History** 15

1 Applicability Table

Table 1: Applicability Table

Products
ATOP 3.5G
CE910 SERIES
DE910 SERIES
FD980 SERIES
FE990 SERIES
FN920 SERIES
FN980 SERIES
FN990 SERIES
FN990B4 SERIES
GE910 SERIES
HE910 SERIES
LE866 SERIES
LE910 SERIES
LE910 V2 SERIES
LE910C1 SERIES
LE910C1-EUX SERIES
LE910C4 SERIES
LE910D1 SERIES
LE910S1 SERIES
LE910R1 SERIES
LE920 SERIES
LE920A4 SERIES
LE922A6 SERIES
LE940B6 SERIES
LM940 SERIES
LM960 SERIES
LN920 SERIES
ME910C1 SERIES
MEx10G1 SERIES
ML865G1 SERIES
SE250 SERIES
UE910 SERIES
UL865 SERIES

2 Introduction

2.1 Scope

This document describes Windows 11 WHQL Drivers Installer. All the features and solutions described in this document apply to all the variants listed in the applicability table.

2.2 Audience

This document is intended for Telit customers, who need to use Telit products with Windows 11 operating system.

2.3 Contact Information, Support

For technical support and general questions, e-mail:

- TS-EMEA@telit.com
- TS-AMERICAS@telit.com
- TS-APAC@telit.com
- TS-SRD@telit.com
- TS-ONEEDGE@telit.com

Alternatively, use: https://www.telit.com/contact-us/

Product information and technical documents are accessible 24/7 on our website: https://www.telit.com

2.4 Conventions

Note: Provide advice and suggestions that may be useful when integrating the module.

Danger: This information MUST be followed, or catastrophic equipment failure or personal injury may occur.

ESD Risk: Notifies the user to take proper grounding precautions before handling the product.

Warning: Alerts the user on important steps about the module integration.

All dates are in ISO 8601 format, that is YYYY-MM-DD.

2.5 Terms and conditions

Refer to https://www.telit.com/hardware-terms-conditions/.

2.6 Disclaimer

THE MATERIAL IN THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY. TELIT CINTERION RESERVES THE RIGHT TO MAKE CHANGES TO THE PRODUCTS DESCRIBED HEREIN. THE SPECIFICATIONS IN THIS DOCUMENT ARE SUBJECT TO CHANGE AT THE DISCRETION OF TELIT CINTERION WITHOUT PRIOR NOTICE. THIS DOCUMENT IS PROVIDED ON “AS IS” BASIS ONLY AND MAY CONTAIN DEFICIENCIES OR INADEQUACIES. TELIT CINTERION DOES NOT ASSUME ANY LIABILITY FOR INFORMATION PROVIDED IN THE DOCUMENT OR ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT DESCRIBED HEREIN.

TELIT CINTERION GRANTS A NON-EXCLUSIVE RIGHT TO USE THE DOCUMENT. THE RECIPIENT SHALL NOT COPY, MODIFY, DISCLOSE, OR REPRODUCE THE DOCUMENT EXCEPT AS SPECIFICALLY AUTHORIZED BY TELIT CINTERION.

TELIT CINTERION AND THE TELIT CINTERION LOGO, ARE TRADEMARKS OF TELIT CINTERION AND ARE REGISTERED IN CERTAIN COUNTRIES. ALL OTHER REGISTERED TRADEMARKS OR TRADEMARKS MENTIONED IN THIS DOCUMENT ARE THE PROPERTY OF THEIR RESPECTIVE OWNERS AND ARE EXPRESSLY RESERVED BY TELIT (AND ITS LICENSORS).

3 Telit WHQL Windows 11 Drivers Installer

3.1 Installer Details

This document covers Telit WHQL Drivers Installer version **11.03.0004**.

Telit provides the following installer:

- **x64**: Telit WHQL Windows 11 Drivers for x64 architecture
  - **Upgrade Code**: {DEE28AA4-E060-4ED1-B0C8-33C4AF0EB189}
  - **Product Code**: {5EEE7586-E5DB-4ECE-97A5-5E44952B4FCE}

3.2 How to Use the Installer

Telit WHQL Drivers Installer supports both attended and unattended installation processes. Administrative rights are required to install the package.

Attended Installation

Run the installer package and, after the welcome screen, choose the preferred installation choice:

- **Complete**: all the drivers are installed.
- **Custom**: only the selected drivers are installed.

Click the Next button to start the installation.

Unattended Installation

- Type the following line to install all the drivers:

```
> msiexec /i <package name> /qn
```

Example

```
> msiexec /i TelitWHQLDriversx64_Win11.msi /qn
```

- To install a subset of drivers type:

```
> msiexec /i <package name> /qn ADDLOCAL=<features set>
```

Example

```
> msiexec /i TelitWHQLDriversx64_Win11.msi /qn ADDLOCAL=FlashUSB
```

USB Compositions with Network Interface

Some USB compositions present a network interface that can be used for establishing a data connection.

When the data connection is up, the USB network interface could conflict with other network interfaces already available in the operating system: Windows network configuration should be managed to have all the interfaces coexist properly.

Avoid COM Port Proliferation

When modems with different serial numbers are plugged into the same host system, a new set of serial ports will be created. To avoid this behavior and reuse the same port numbers the registry should be modified according to the file.

```
C:\Program Files
(x86)\Telit\WHQLDrivers_Win11\usb_xhci_avoid_COM_port_proliferatio
n.reg
```

To avoid COM port proliferation:

1. If already installed, from Device Manager uninstall all devices for which COM port proliferation should be avoided.
2. Verify that the module is not connected to the host.
3. Customize the registry according to the instructions in the file.
4. Double-click on the customized registry file and accept to modify the registry.
5. Connect the module.

   Warning: These keys modify a Windows behaviour and they are not strictly related to Telit drivers. Not all the host controllers support this feature, so they can be ineffective. Further information in Microsoft Hardware Dev Center.



4 Supported Modems by Product ID

4.1 Table of Product IDs

Following a list of Product IDs (PIDs) supported by the installer.

When a composition requires an inbox driver, the device type is reported. Inbox drivers are not installed by Telit installers since they belong natively to the operating system.

For details on the composition please refer to the AT Commands User Guide of the modem in use.

Table 2: Supported PIDs

Product ID	Inbox Driver	Selective Suspend
0x0021	N/A	N
0x0022	N/A	N
0x0023	N/A	N
0x0024	N/A	N
0x0025	N/A	N
0x0032	MBIM	N
0x0035	N/A	N
0x0036	N/A	N
0x0037	N/A	N
0x0100	N/A	N
0x1000	N/A	N
0x1001	N/A	N
0x1002	N/A	N
0x1003	N/A	N
0x1004	N/A	N
0x1005	N/A	N
0x1006	N/A	N
0x1010	N/A	N
0x1011	MBIM	N
0x1012	N/A	N
0x1013	N/A	N
0x1014	N/A	N
0x1015	N/A	N
0x1017	N/A	N
0x1018	N/A	N
0x1019	N/A	N
0x101B	MBIM	N
0x1031	N/A	N
0x1032	N/A	N
0x1034	N/A	N
0x1036	N/A	N
0x1037	N/A	N

Product ID	Inbox Driver	Selective Suspend
0x1038	N/A	N
0x103A	N/A	N
0x103B	N/A	N
0x103C	N/A	N
0x1040	N/A	N
0x1041	MBIM	N
0x1042	RNDIS	N
0x1044	MBIM	N
0x1045	RNDIS	N
0x1050	N/A	N
0x1051	MBIM	N
0x1052	RNDIS	N
0x1054	N/A	N
0x1055	N/A	N
0x1056	RNDIS	N
0x1057	N/A	N
0x1058	N/A	N
0x1060	N/A	N
0x1061	MBIM	N
0x1062	RNDIS	N
0x1066	MBIM	N
0x1067	MBIM	N
0x1070	N/A	N
0x1071	MBIM	N
0x1072	RNDIS	N
0x1074	MBIM	Y
0x1075	N/A	N
0x1076	N/A	Y
0x1077	N/A	N
0x1078	MBIM	N
0x1079	RNDIS	N
0x1080	N/A	N
0x1081	MBIM	N
0x1082	RNDIS	N
0x1084	MBIM	Y
0x1085	N/A	N
0x1086	N/A	Y
0x1095	N/A	Y
0x10A5	N/A	Y
0x1100	N/A	N
0x1101	N/A	N
0x110A	N/A	N
0x1200	N/A	N

Product ID	Inbox Driver	Selective Suspend
0x1201	N/A	N
0x1203	RNDIS	N
0x1204	MBIM	N
0x1205	MBIM	N
0x1207	N/A	N
0x1212	N/A	N
0x1216	N/A	N
0x1217	N/A	N
0x1221	N/A	N
0x1222	N/A	N
0x1223	N/A	N
0x1227	N/A	N
0x1228	N/A	N
0x1250	N/A	N
0x1251	RNDIS	N
0x1252	MBIM	N
0x1254	N/A	N
0x1255	N/A	N
0x1260	N/A	N
0x1261	N/A	N
0x1262	N/A	N
0x1400	N/A	N
0x1401	N/A	N
0x1980	RNDIS	N
0x1981	N/A	N
0x1982	RNDIS	N
0x2300	RNDIS	N
0x7010	RNDIS	N
0x701A	RNDIS	N
0x8000	MBIM	N
0x800A	N/A	N

5 Features

Following the list of features exposed by the installer.

Table 3: Features

Feature	Description
MultipleInterface	Composite device driver for Intel-based modems
ACM	Serial port driver for Intel-based modems (requires MultipleInterface)
ECM	ECM network interface driver for Intel-based modems (requires MultipleInterface)
FlashUSB	Flashing device driver for Intel-based modems
ModemACM	Modem driver for Intel-based modems (requires MultipleInterface)
NCM	NCM network interface driver for Intel-based modems (requires MultipleInterface)
Filter	Composite device driver for Qualcomm-based modems
wwan	Rmnet mobile broadband adapter driver for Qualcomm-based modems (requires Filter)
Serial	Serial port driver for Qualcomm-based modems (requires Filter)
Modem	Modem driver for Qualcomm-based modems (requires Filter)
qcadb	Android debug bridge driver for Qualcomm-based modems (requires Filter)
qdbusb	Logging device driver for Qualcomm-based modems (requires Filter)
InboxComposite	Inbox composite device driver
InboxRNDIS	Inbox RNDIS network interface driver
InboxACM	Inbox serial port driver
Tools	Qualcomm MTU service
Registry	Registry example to avoid COM port proliferation
ASRSerial	Serial port driver for ASR-based modems
ASRModem	Modem driver for ASR-based modems
ASRDiag	Diagnostic device driver for ASR-based modems

6 Troubleshooting

6.1 Debug information retrieval

When contacting customer support for help on troubleshooting issues, please make sure to carefully describe the scenario and provide the following logs:

```
msiexec log output with /l*v option
```

> **Note:** To have better support and solve the issue quickly, please follow these guidelines when collecting logs.
>
> Provide a brief description of the scenario captured in the logs.

7 Acronyms and Abbreviations

Table 2: Acronyms and Abbreviations

Acronym	Definition
ACM	Abstract Control Model
ECM	Ethernet Control Model
MBIM	Mobile Broadband Interface Model
NCM	Network Control Model
RNDIS	Remote Network Device Interface Specification
USB	Universal Serial Bus
WHQL	Windows Hardware Quality Labs

8 Related Documents

Refer to https://dz.telit.com/ for current documentation and downloads.

9 Document History

Table 3: Document History

Revision	Date	Changes
4	2023-10-25	Added LN920 PID 0x1067 Updated MSI installers version and product codes Added FE990 PIDs 0x1077, 0x1078, 0x1079 Added FN920 to Applicability Table Added FN920 PID 0x10A5 Added FN990B4 to Applicability Table Added FN990B4 PID 0x1095 Added SE250 to Applicability Table Added SE250 PIDs 0x1980, 0x1981, 0x1982
3	2023-05-26	Template upgrade
2	2023-05-17	Added FE990 PIDs 0x1080, 0x1081, 0x1082, 0x1084, 0x1085, 0x1086 Added FN990 PIDs 0x1074, 0x1076 Added column “Selective Suspend” to Table 2 Changed feature “adb” to “qcadb” in Table 3 Updated MSI installers version and product codes
1	2022-11-23	Add LE910Cx Thread-x PID 0x103A, 0x103B, 0x103C Updated MSI version number and product code
0	2022-04-26	First issue

From Mod.0818 Rev.11

© Telit 2023 All rights reserved.

Technical Documentation

