

# 1. General

At the beginning of a custom image, some basic data is needed, such as the internal assignment of the COM interfaces.

Furthermore, some well-known topics are discussed here.

# 2. Pre-defined COM Port's

The HotTab application works with a fixed COM port assignment. We have the following port mapping in our images:


| COM - Port | Description   |
|------------|---|
| COM 1      | RS232 on I/O (30-pin Combo Connector)   |
| COM 2      | RS232 on Expansion Port   |
| COM 3      | HF RFID (RF521)   |
| COM 5      | WWAN modem  |
| COM 6      | WWAN modem  |
| COM 9      | GPS   |
| COM 11     | RS232 on Docking  |
| COM 12     | Reserved (actual not in use)  |
| COM 15     | Agile X – Typ B7-A234-****/*****<br>1D/2D Barcode Reader (Intermec – EA30)<br>Agile X IS – Typ 17-A1B4-****/*****<br>1D/2D Barcode Reader (Zebra – SE4500-SR) |
| COM 20     | External interface for UHF RFID Reader (Micro) or HART add-on module  |
| COM 21     | Reserved (actual not in use)  |
| COM 34     | Reserved (actual not in use)  |





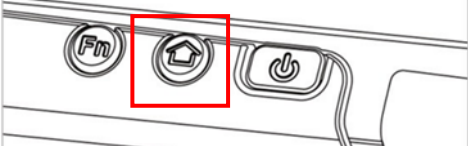
In order for the application to work well under other operating systems, some COM ports must be renamed (it depends on the configuration of the end device). See the example in the chapter for the scan engine.

### 3. HotTab Tool

HotTab provides quick access to the tablet's functions and features, such as turning on/off Wifi, Bluetooth, GPS, programming function key, and so on.

|   |  |
|---|--|
|  | <p>If the HotTab app is not running on the device, some features (including the hot keys) are no longer available to the user. For example, if the customer wants to assign a special key combination to an Fn key, the HotTab application must run in the background.</p> |
|---|--|

As Windows starts up, HotTab starts and runs in the background. To display the HotTab tool, press the  (Menu) Button located on the front panel, OR launching the HotTab Utility application.


|                               |   |
|-------------------------------|---|
| HotTab Tooly Icon             |   |
| Menu Button on the Front side |  |


The latest version of HotTab is available on BARTEC download page or can be requested.

<http://automation.bartec.de/indexE.htm>

#### Agile X 10.1" Industrial Tablet PC

Manuals
Driver
SDK
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**Installation instruction for HotTab system utility** 






**Hottab System Utility v1.73 (for Agile and Agile X)** 

*This package provides Hottab System Software Utility and is supported on the Agile and Agile X tablets that are running the following Microsoft Windows Operating System: Windows 7/8.1/10.*

Direct link to the program:

[http://automation.bartec.de/DataRoot/tablet/AgileX-10.1/tools/Hottab\\_A40.1.73.zip](http://automation.bartec.de/DataRoot/tablet/AgileX-10.1/tools/Hottab_A40.1.73.zip)

HotTab is designed to be a quick access utility, therefore the main user interface will be on the right side of the screen without blocking the content on screen. There are 4 main menu control options: Short cuts, Camera, Device and Settings. Operations and functions on each menu options are explained in detail in the coming sections.

|  |  |
|--|--|
|  <p>Shortcuts</p>     | <p><b>Shortcuts</b> button allows users to configure short cuts to quickly access programs.</p>  |
|  <p>Camera</p>        | <p><b>Camera</b> button allows users start the cam app in order to take a picture or record a video. User can also adjust setting related to camera.</p>   |
|  <p>Device ON/OFF</p> | <p><b>Device ON/OFF</b> button enables/disables tablet computer's hardware functions. The configurable functions are Wi-Fi, WWAN (3G/4G/LTE), GPS, Bluetooth, Camera, LED indicators, Barcode Reader, RFID Reader, Expansion Port, and GPS Antenna routing options.</p>  |
|  | <div style="display: flex; align-items: center;">  <p>Only components are shown in this menu what are built in. For example barcode scanner does not appear in devices without barcode option.</p> </div> |
|  <p>Setting</p>       | <p><b>Setting</b> menu provides information about installed versions and battery status.</p> <ul style="list-style-type: none"> <li>• BIOS Version</li> <li>• HotTab Version</li> <li>• OS Version</li> <li>• Serial Number</li> <li>• Battery status</li> </ul>   |

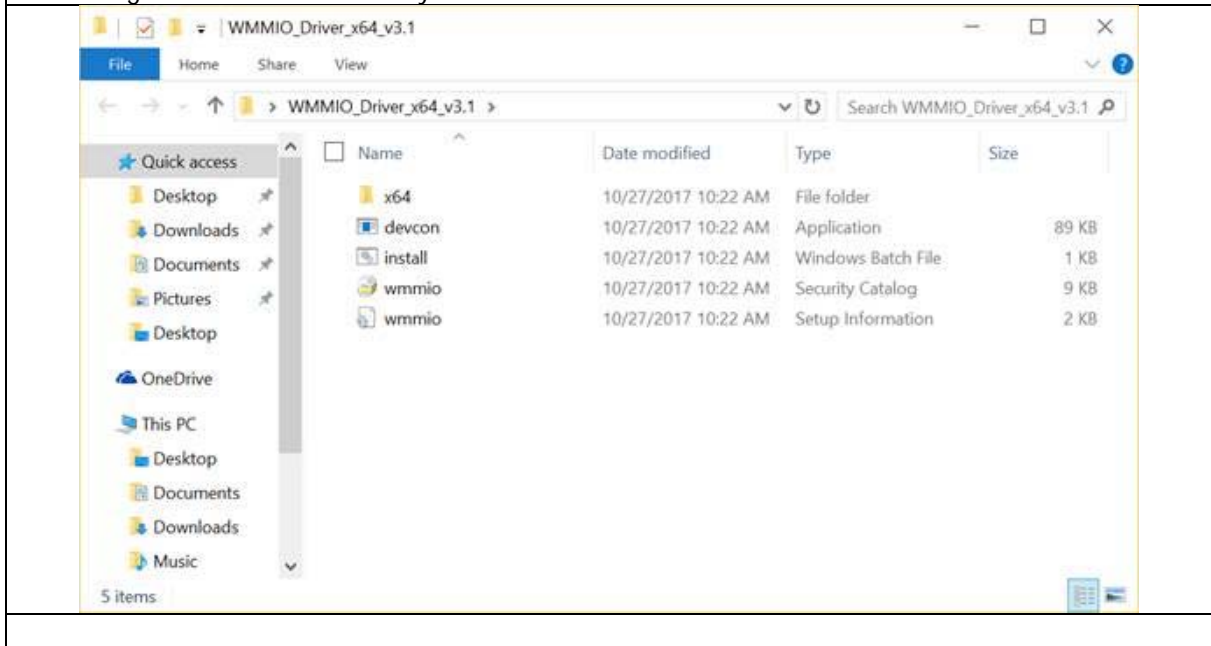
## 4. WMMIO driver for HotTab Tool

Below are a few screenshots of the installation process of the WMMIO driver.



The screenshots were created under Windows 8.1. In the case of a Windows 7 operating system, the console (cmd) must be started from another location (from Start menu or directly from Windows\System32). Navigate from there within "cd" command into the driver directory.

First navigate to the driver directory and start the CMD console from there:

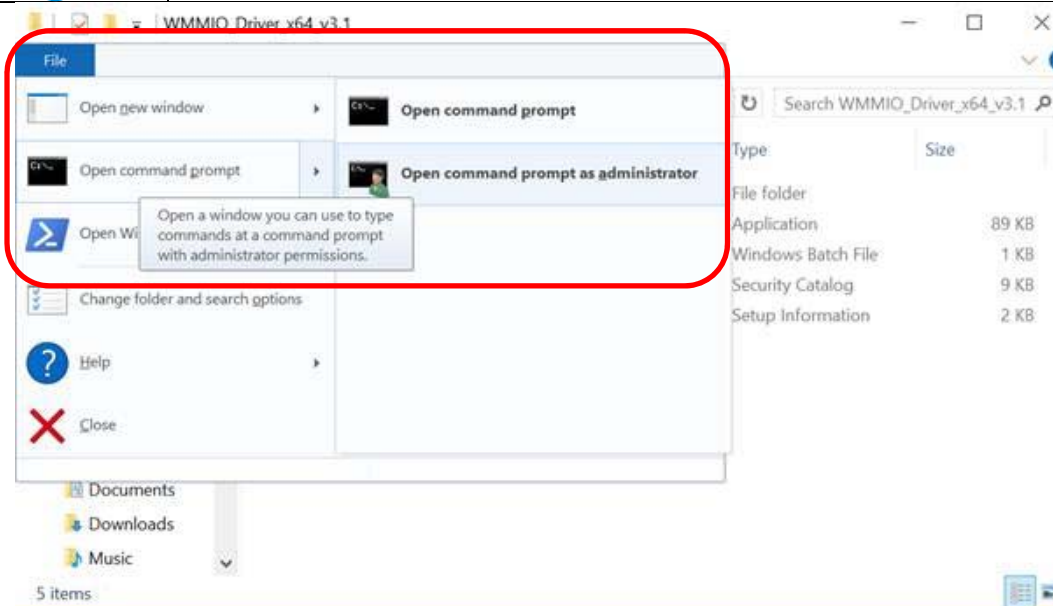


Path to open it:

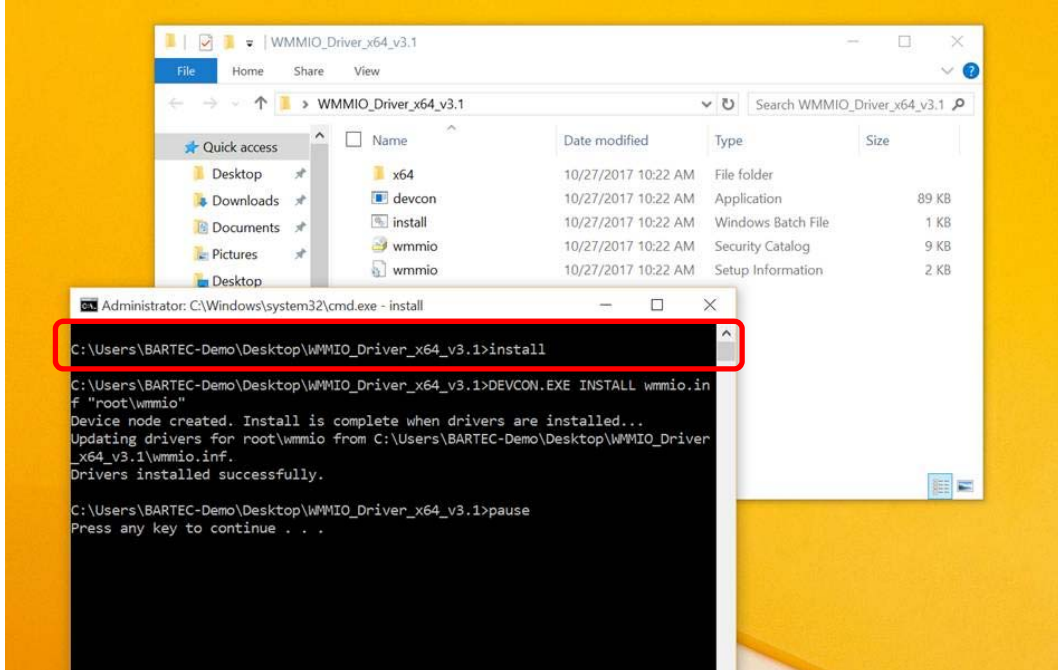
File -> Open command prompt -> Open command prompt as administrator



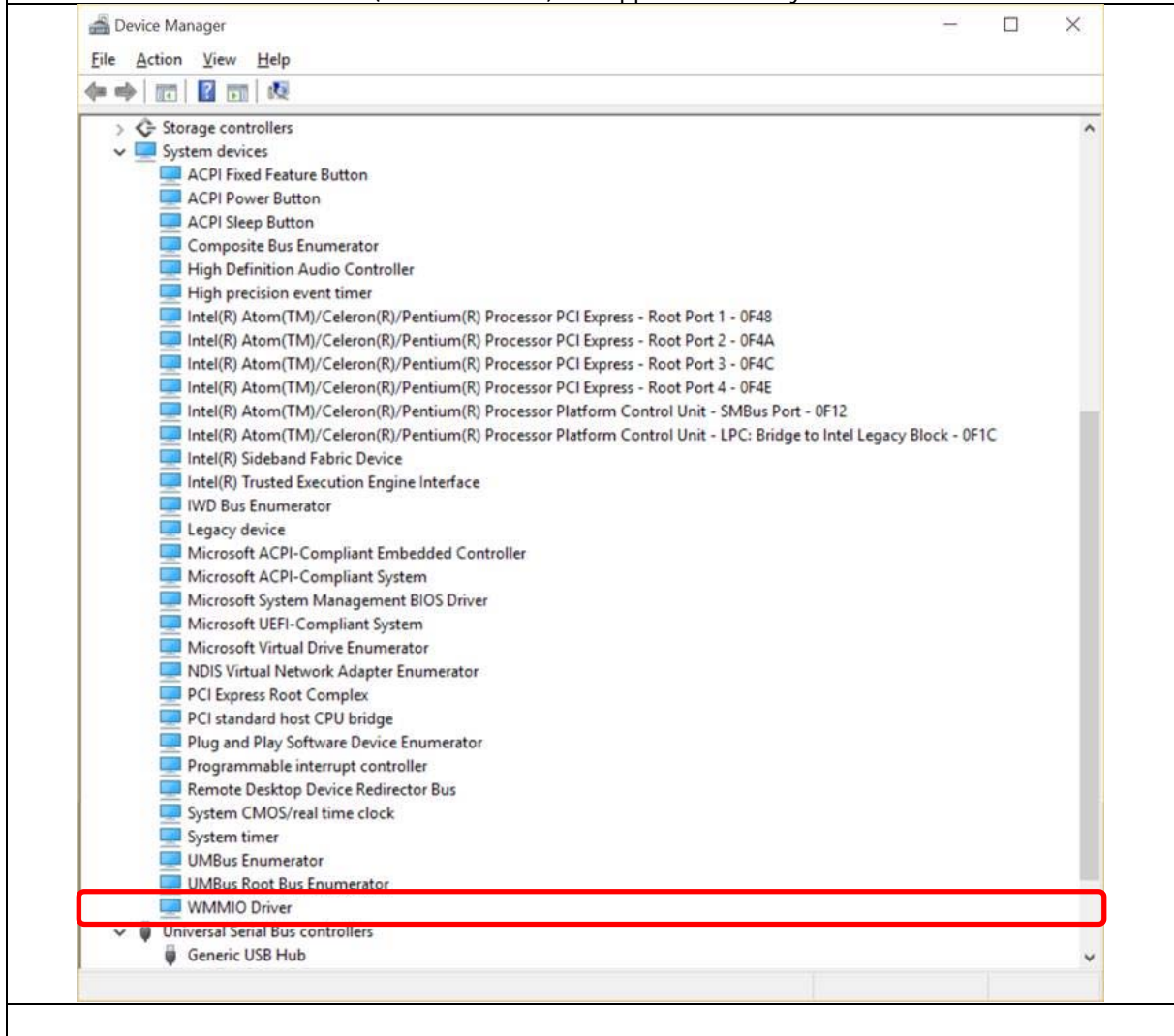
Description is for Windows 8.1 and Windows 10.



Then type "install" (name of the batch file) in the window and execute the installation with Enter key.



After installation, a new device (WMMIO Driver) will appear under "System Devices":

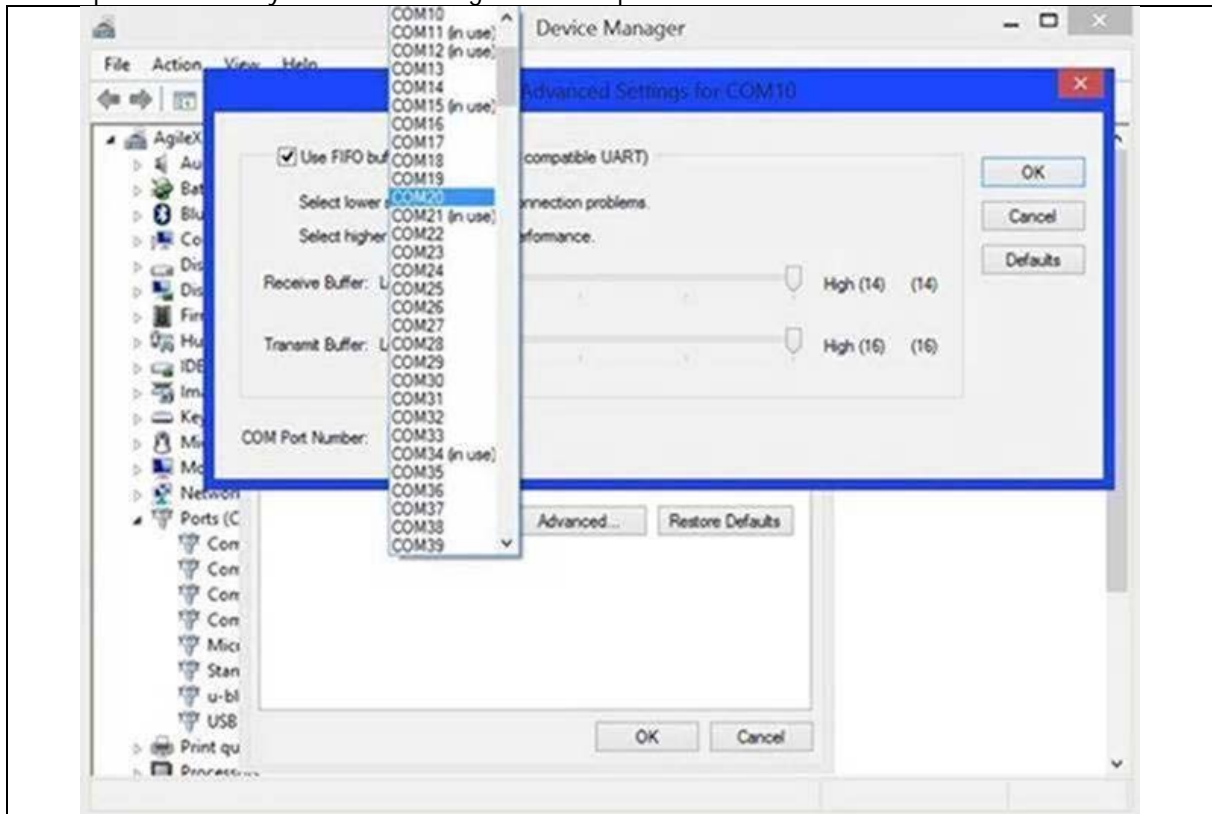


## 5. Scan Engine – Example for COM port assignment

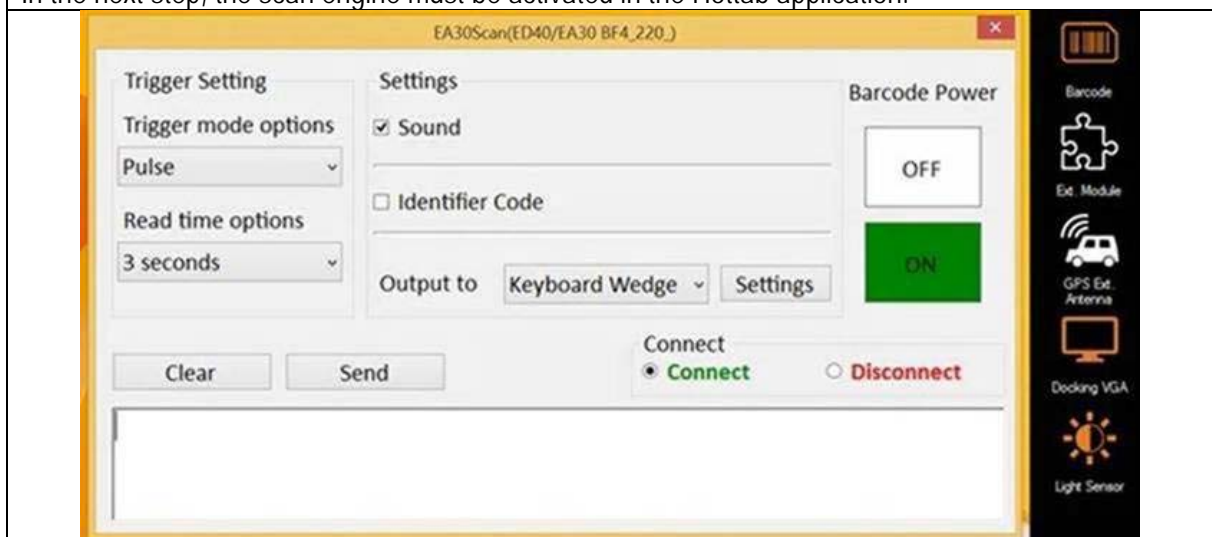
That the Hottab application can work without any problems even under a customer operating system, some COM ports must be adapted.

This can be achieved via the Device Manager (COM Port -> Properties -> Port Settings -> Advanced). In case of a clean installation the barcode scanner is normally to COM 4 assigned. (Otherwise you must check the other ports).

In the opened window you have to change the COM port 4 to 15.



In the next step, the scan engine must be activated in the Hottab application:

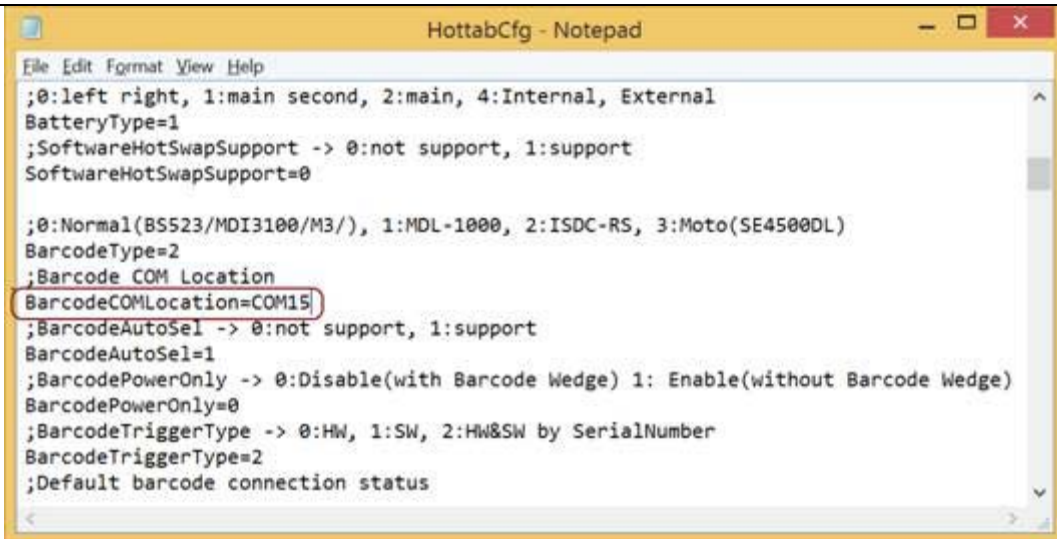


This can be achieved by clicking on the barcode icon. Then set the power setting to "ON" in the opened EA30Scan program and the connect setting to "Connect".

Alternatively, you can specify another port as default in the Hottab application.

Here is a setting for the barcode's COM port number in the config file:

BarcodeCOMLocation=COM15 represents the default COM port number for the barcode reader e.g. BarcodeCOMLocation=COM4.



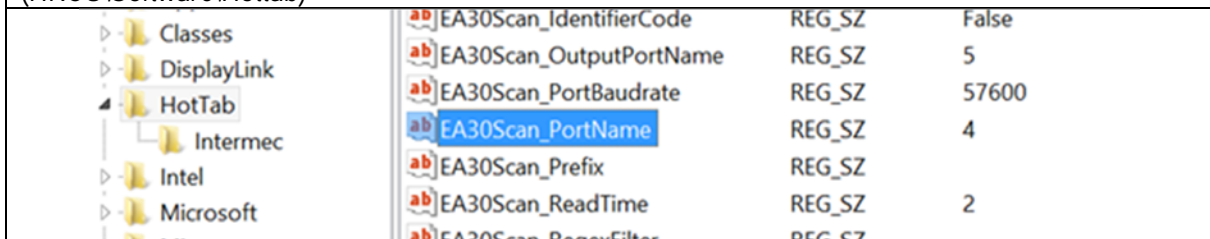
```
File Edit Format View Help
;0:left right, 1:main second, 2:main, 4:Internal, External
BatteryType=1
;SoftwareHotSwapSupport -> 0:not support, 1:support
SoftwareHotSwapSupport=0

;0:Normal(BS523/MDI3100/M3/), 1:MDL-1000, 2:ISDC-RS, 3:Moto(SE4500DL)
BarcodeType=2
;Barcode COM Location
BarcodeCOMLocation=COM15
;BarcodeAutoSel -> 0:not support, 1:support
BarcodeAutoSel=1
;BarcodePowerOnly -> 0:Disable(with Barcode Wedge) 1: Enable(without Barcode Wedge)
BarcodePowerOnly=0
;BarcodeTriggerType -> 0:HW, 1:SW, 2:HW&SW by SerialNumber
BarcodeTriggerType=2
;Default barcode connection status
```

In the place one can define the desired port, e.g. BarcodeCOMLocation = COM4.

P.S. Settings from this file are only relevant for a new installation (or for first-time login).

If the Hottab application has already been started (with the default config), then the corresponding entries for the already logged-in users must be corrected directly in the registry:  
(HKCU\Software\Hottab)



|             |                            |        |       |
|-------------|----------------------------|--------|-------|
| Classes     | ab EA30Scan_IdentifierCode | REG_SZ | False |
| DisplayLink | ab EA30Scan_OutputPortName | REG_SZ | 5     |
| HotTab      | ab EA30Scan_PortBaudrate   | REG_SZ | 57600 |
| Intermec    | ab EA30Scan_PortName       | REG_SZ | 4     |
| Intel       | ab EA30Scan_Prefix         | REG_SZ |       |
| Microsoft   | ab EA30Scan_ReadTime       | REG_SZ | 2     |
|             | ab EA30Scan_RegexFilter    | REG_SZ |       |



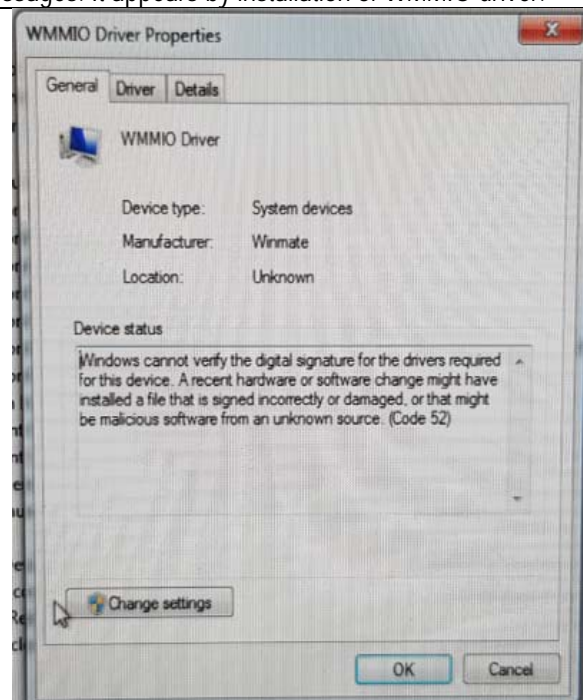
## 6. FAQ's



The following description is valid for following operating systems:

- Windows 10
- Windows 8.1
- Windows 7 Professional
- Windows 7 Ultimate

Q: What is the meaning and reason for the following messages. It appears by installation of WMMIO driver.



**Answer:**

**Step 1:**

The error message (52) indicates that the operating system is preventing loading from the driver due to un-signing. The installation described in chapter for WMMIO driver ensures that all driver files (including the signature) are placed in the right places. This is absolutely necessary for ensuring functionality. Each signature also has the corresponding validity or the date "valid from". Please also check the date set on the device. (if necessary, change it to current date)

**Step 2:**

Please check if the installed operating system is also up-to-date. If this is not the case, then please automatically search for the new updates and install. For an offline installation, feel free to follow Microsoft's recommendations. (Guideline is for Windows 10, but it also applies to Windows 7 Ultimate / Professional).

**Additional information:**

Microsoft has changed the signing driver's mechanism in the past. The .cat file is still signed with SHA-1, but the binary file is SHA-2. In order to handle the old and new logic correctly, some security updates must be installed.

Here is the link to the Microsoft site concerning this issue:

<https://docs.microsoft.com/en-us/security-updates/SecurityAdvisories/2015/3033929>

That mean the following update must be installed on the device:

<https://www.microsoft.com/en-us/download/details.aspx?id=46148>

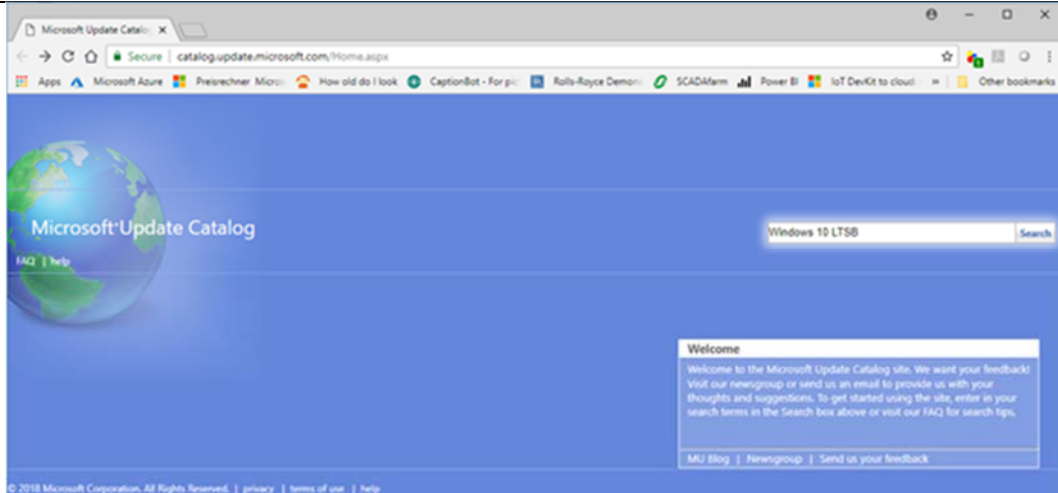
Because Microsoft publishes for Windows 7 cumulative updates, the small patches no longer have to be individually downloaded and installed. It is sufficient to install the cumulative package, because it will contain all previous updates.

## Offline update Windows 10 IoT Enterprise LTSB

If you do not like to update your system online with Windows Updates you can also do that completely offline by using the Microsoft Update Catalog Website.

Please enter the Website:

<http://catalog.update.microsoft.com>



Type "Windows 10 LTSB" in the search field and sort it by "Last Updated".

A screenshot of the Microsoft Update Catalog search results page for "Windows 10 LTSB". The page shows a list of updates with columns for Title, Products, Classification, Last Updated, Version, Size, and a Download link. The updates are sorted by "Last Updated".

| Title  | Products   | Classification   | Last Updated | Version | Size      | Download |
|--|--|------------------|--------------|---------|-----------|----------|
| 2018-06 Delta Update for Windows 10 Version 1607 for x86-based Systems (KB4284880)                           | Windows 10/Windows 10 LTSB   | Security Updates | 6/12/2018    | n/a     | 351.1 MB  | Download |
| 2018-06 Delta Update for Windows 10 Version 1607 for x64-based Systems (KB4284880)                           | Windows 10/Windows 10 LTSB   | Security Updates | 6/12/2018    | n/a     | 727.0 MB  | Download |
| 2018-06 Cumulative Update for Windows 10 Version 1607 for x86-based Systems (KB4284880)                      | Windows 10/Windows 10 LTSB   | Security Updates | 6/12/2018    | n/a     | 676.2 MB  | Download |
| 2018-06 Cumulative Update for Windows 10 Version 1607 for x64-based Systems (KB4284880)                      | Windows 10/Windows 10 LTSB   | Security Updates | 6/12/2018    | n/a     | 1288.0 MB | Download |
| 2018-05 Update for Windows 10 Version 1607 for x86-based Systems (KB4132216)                                 | Windows 10/Windows 10 LTSB   | Critical Updates | 6/12/2018    | n/a     | 5.3 MB    | Download |
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| 2018-06 Cumulative Update for Windows 10 Version 1507 for x86-based Systems (KB4284880)                      | Windows 10 LTSB  | Security Updates | 6/10/2018    | n/a     | 488.5 MB  | Download |
| 2018-06 Cumulative Update for Windows 10 Version 1507 for x64-based Systems (KB4284880)                      | Windows 10 LTSB  | Security Updates | 6/10/2018    | n/a     | 905.9 MB  | Download |
| Windows Malicious Software Removal Tool x64 - June 2018 (KB890630)   | Windows 10/Windows 10 LTSB; Windows 8/Windows 8.1/Windows Server 2012/Windows Server 2012 R2/Windows Server 2016 | Update Rollups   | 6/8/2018     | n/a     | 53.7 MB   | Download |
| Windows Malicious Software Removal tool - June 2018 (KB890630)   | Windows 10/Windows 10 LTSB; Windows 8/Windows 8.1  | Update Rollups   | 6/8/2018     | n/a     | 52.4 MB   | Download |
| 2018-06 Security Update for Adobe Flash Player for Windows 10 Version 1507 for x86-based Systems (KB4287902) | Windows 10 LTSB  | Security Updates | 6/6/2018     | n/a     | 10.2 MB   | Download |
| 2018-06 Security Update for Adobe Flash Player for Windows 10 Version 1507 for x64-based Systems (KB4287902) | Windows 10 LTSB  | Security Updates | 6/6/2018     | n/a     | 20.9 MB   | Download |
| 2018-06 Security Update for Adobe Flash Player for Windows 10 Version 1607 for x86-based Systems (KB4287902) | Windows 10/Windows 10 LTSB   | Security Updates | 6/6/2018     | n/a     | 10.2 MB   | Download |
| 2018-06 Security Update for Adobe Flash Player for Windows 10 Version 1607 for x64-based Systems (KB4287902) | Windows 10/Windows 10 LTSB   | Security Updates | 6/6/2018     | n/a     | 20.9 MB   | Download |
| 2018-05 Update for Windows 10 Version 1607 for x86-based   |  |                  |              |         |           |          |

Please download the last "Critical Update" and the last "Security Update" as the "Cumulative Update" Version (not the Delta Update Version) for your Windows Version (x32 or x64).



The cumulative Security Update could be larger than 1 GB because it includes all updates since the Release Date.

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**2018-06 Cumulative Update for Windows 10 Version 1607 for x64-based Systems (KB4284880)**

`windows10.0-kb4284880-x64_34d88e02608fa8c7db3dda395434d93ba109169c.msu`

[Close](#)

With this .msu files you will be able to update your system without connecting it to the internet.



**Very Important** is now that you first install the last "Critical Update" because it will install the last Version of the Microsoft Servicing Stack. Without that you will not be able to install the last cumulative Update.

To install the downloaded .msu files just double click to it and follow the instructions.

Windows Update Standalone Installer

Preparing the installation...

[Cancel](#)

Windows Update Standalone Installer



Windows Update Standalone Installer

Do you want to install the following Windows software update?

Security Update for Windows (KB4284880)

Yes

No

Windows Update Standalone Installer

Copying packages to the Windows Update cache...

Cancel

Download and Install Updates

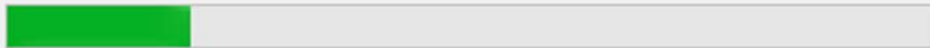


The updates are being installed

Installation status:

Initializing installation... done!  
Installing Security Update for Windows (KB4284880) (update 1 of 1)... |

Installing:



Cancel

