

# Holt HI-8582 Demo Project

## Installation Guide

### June 21, 2017

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This installation guide provides instructions for installing IAR Systems *Embedded Workbench® for ARM (EWARM)* and the Holt Demo projects for the HI-8582 Application Development Kit ADK 8582.

Software installation starts with IAR Systems *EWARM* installation, then unzipping two Holt demo project folders and copying them to specific locations within a project directory.

#### **Installation Requirements:**

1. *EWARM* version 7.1 or greater is **required**. Since the demo program size is less than 32K the free KickStart version is usable.
2. The fully functional 30-day *EWARM* trial version from IAR is required. The API demo program exceeds the 32K byte size limit of the *EWARM* Kickstart version. IAR requires registration at their website in order to use the IAR toolset. Holt cannot provide evaluation licenses for IAR tools.
3. Microsoft *Windows® 7* or greater. *Windows® XP* was not tested.
4. Holt HI-8582 Demo CD-ROM or ZIP file.

#### IAR Systems *Embedded Workbench® for ARM* Installation:

1. Locate the included IAR installation CD-ROM for IAR *EWARM* installation, or download the latest *EWARM* version from the IAR website:

<https://www.iar.com/iar-embedded-workbench/downloads/>

Do not attempt to copy the Holt demo projects from the CD-ROM or ZIP file until instructed to do so.

Installing IAR *EWARM* is easiest when the computer is connected to the Internet. IAR provides a way to install *EWARM* without an Internet connection, but the process is complicated and time consuming, so an Internet connection is highly recommended. See IAR documentation for other installation information. If you attempt an off-line installation and encounter problems, contact IAR technical support.

<http://www.iar.com/Service-Center/Technical-Support/>

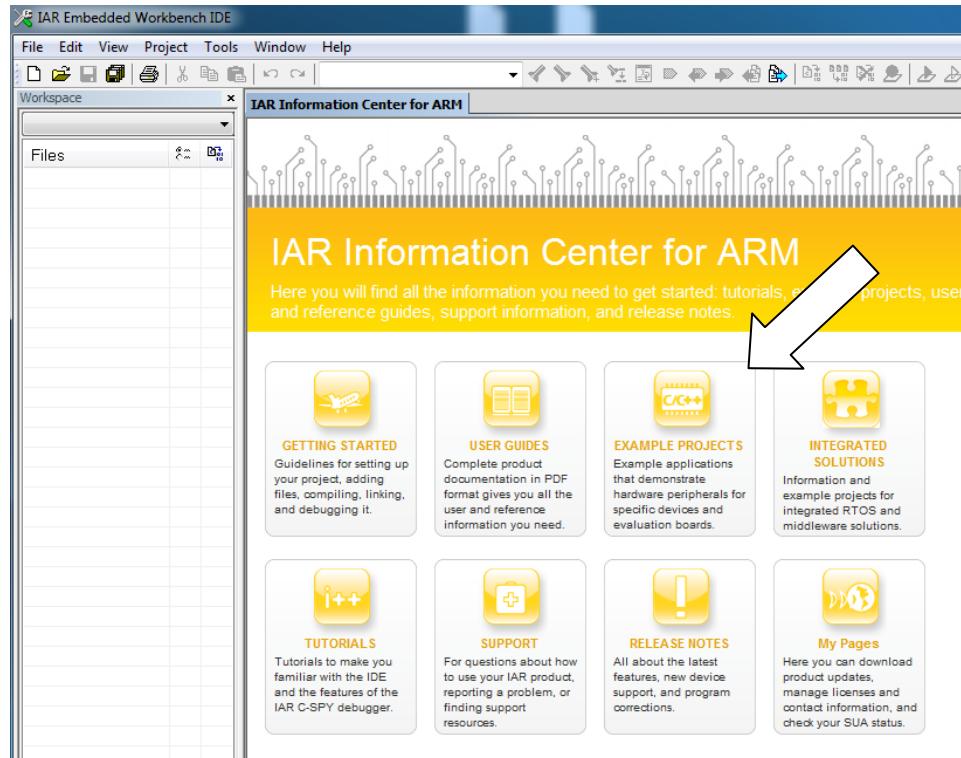
2. Install IAR *EWARM* from the CD-ROM or from the downloaded installer program, and follow the default installation steps. When prompted, register with IAR. Use the license number they provide to complete the installation. The 32K size-limited Kickstart version will work because the Holt demo project is less than 32K size limit. During customer development if the size exceeds 32K the customer will need to purchase a full version or use the full 30-day trial version.

3. After *Embedded Workbench® for ARM* is installed, you must install one Example Project for Atmel ARM from the IAR “Information Center for ARM” pull down menu, seen below. This is a critical step because it installs the standard Atmel ARM Cortex M3 folders and libraries in locations expected by the *EWARM* software.

Here is the step-by-step Atmel ARM project installation sequence...

If the “Information Center for ARM” page is not already displayed, select **Information Center** from the **Help** pull-down menu.

Click on “Example Projects” ...



From **Example Projects**, choose Atmel...

IAR Information Center for ARM - EXAMPLE PROJECTS

Aiji	
AnalogDevices	
ATTEL	

IAR Information Center for ARM | EXAMPLES

**EXAMPLE PROJECTS**

Example applications that demonstrate hardware peripherals for specific devices and evaluation boards.

**Installed example projects**

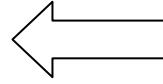
**ATTEL**

**Example projects that can be downloaded**

**Aiji**

**AnalogDevices**

**ATTEL**



Download takes several minutes, even on a fast Internet connection.

After Atmel ARM examples have downloaded, select device **at91sam3u-ek**.

IAR Information Center for ARM

IAR Information Center for ARM | EXAMPLES

**Examples for ATTEL**

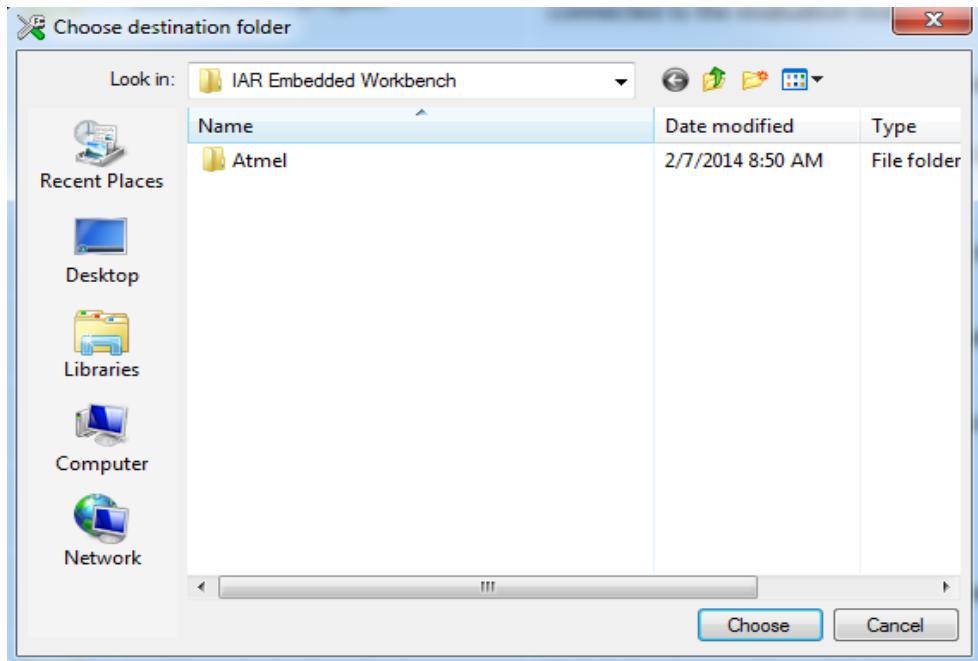
	<b>at91cap9-dk</b>
	<b>at91cap9-stk</b>
	<b>at91rm9200-ek</b>
	<b>at91sam3s-ek</b>
	<b>at91sam3u-ek</b>



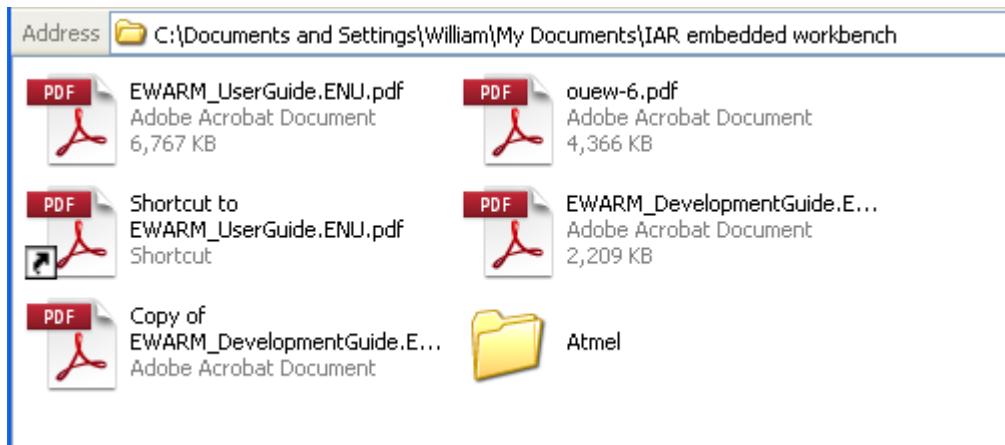
Select the **getting-started-project** to open, and then save the project in the My Documents folder for the current user.

		basic-twi-tempsensor-project	Operate tempsensor using twi
		basic-usart-hw-handshaking-project	Regulates the speed of a USART file trans
		getting-started-project	Details basic operations with AT91SAM de
		test-chip-id-project	Read and print chip's ID and features
		test-power-consumption-sam3-project	Test the core consumption of sam3
		usb-device-cdc-serial-project	This software acts as a bridge between a l is created on the host computer, enabling

Choose the default project folder location shown below by clicking the **Choose** button.



This will install the necessary Atmel library and board support folders and files, and the **getting-started-project** folder under the main “Atmel” folder in My Documents for the current user name: Your version might not include the EWARM documents shown here...



#### 4. Install both Holt Projects...

Navigate with Windows Explorer to the `at91sam3u-ek` folder in My Documents. Copy the ZIPPED Holt project files to the Windows Desktop (or other temporary location) and unzip the project files. Move or copy the un-ZIPPED Holt project folder into the directory location shown here...

`C:\Documents and Settings\User\My Documents\IAR embedded workbench\Atmel\at91sam3u-ek`

If done correctly, the `at91sam3u-ek` folder should now contain the Holt project folder:

Holt HI-8582 Demo

The Atmel `getting-started-project` demo should already be inside this folder too but is not needed and can be deleted

This completes the installation of IAR Systems *Embedded Workbench® for ARM* and placement of standard Atmel ARM demo along with the Holt demo project folder. See the *Holt AN-8582 ADK Users Guide* to get started. Review IAR user guides from the IAR “Help” pull-down menu for information on using the IAR EWARM toolset: C compiler, linker and debugger.