IA:

Dev Tools and Resources

(Platform section)

Documentation and Training

(other item)

**This tutorial**

(other item)

Platform Documentation and Training page update:

### Training

* …
* (other tutorial)  
  Other tutorial blurb
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Supporting content:

When preparing the tutorial ensure the following are created and stored:

* jpgs/pngs of any unaltered/original images/photos/screenshots
* SNAG files file any annotated images (ppt or Visio would be OK – basically a format with the annotations as objects)
* Friztings as native file
* Other diagrams etc. ppt or Visio

Meaningful names for images (e.g. not just SnagIt raw datestamps)

Guidelines for images and screenshots are provided here:

* Screenshots: <https://drive.google.com/open?id=1Kj7Ro6YH5SckBLXfMwZFu97LPOzs9Nymx7aB193Dw4c>
* Images general: <https://drive.google.com/open?id=1i_XmRU5pacI9x3fbP2StBHMByY_WrSbOUCrHPPx9_Ik>

Tutorial content:

**Title: (Tutorial title)**

# Introduction

(The key features of the tutorial/prototype and what the developer should expect to learn.)

This tutorial guides you through:

* Building the prototype, with details of the hardware requirements and how to put them together to create the (tutorial hardware).
* Creating the software to (description of software function).
* Creating (any other components of the tutorial, e.g. MCS).
* Running (the prototype and observing some outcome).

At the end of the tutorial there are details on where to go for additional information on the LinkIt (version) development board and how to create software for it.

# Before you start

If you haven’t built a LinkIt (version) project before using (any additional tools/features/services), this section describes the steps you need to follow before commencing this project.

## Setup your development environment

Full details on setting up the necessary LinkIt (version) development environment can be found in (link to get started guide). Complete this before you continue, if you haven’t already set up your development environment.

## MediaTek Cloud Sandbox (if applicable)

This tutorial used the MediaTek Cloud Sandbox (MCS) to (description of purpose). To use MCS [register](http://labs.mediatek.com/dpRegister/create) for a Labs account, if you haven’t done so already, and [activate](http://labs.mediatek.com/mcs) your MCS account. You will then be able to define prototypes for your own devices and applications. By registering on Labs you also gain access to the hardware reference designs, the ability to submit and respond to items in the [forums](http://labs.mediatek.com/forums/forums/list.page), and more.

## Third-party software and services (if applicable)

(List any third party software or service requirements, such as registration with PubNub, Mapbox, etc.)

## Other hardware and software

Details of other (non-development board related) hardware or software needed, e.g. Android phone and MCS app.

# Building the (tutorial) Hardware

This section describes the hardware and electronics needed to build (tutorial) and provides details on how to put them together.

## What you need

To build the (tutorial) hardware, in addition to a LinkIt (version) development board, you need the following components:

|  |  |  |
| --- | --- | --- |
| Component | Description | Source |
| **(item)** | (description) | LinkIt (version) development kit (e.g. in the box) or (Purchase site/page with hyperlink) |
| **…** | … | … |

## Schematics

You will assemble the components of the (tutorial) according to the following schematic.

Fritzing or other suitable schemetic

(This image was created with [Fritzing](http://fritzing.org/).)

Electronic circuit diagram of the (tutorial)

## Putting the components together

This section provides step-by-step instructions on putting the (tutorial) hardware together.

### Step 1– (component added)

Attach (what and how)

(Photo illustrating the component and its connection to the development board)

Connecting the (component)

### Step 2 (to n as needed) – (component added)

Attach (what and how)

(Photo illustrating the component and its connection to the development board)

Connecting the (component)

# Setup MCS or third party site

(Introduction to what will be achieved with MCS or third-party site)

## Registration

(Describe the registration process)

## Setup

(Provide a step by step guide to the necessary set-up)

(A template for MCS will be provided)

# Create your (tutorial)’s software

Your (tutorial) needs a (type of software) to (function performed). This section describes the software required as follows:

* Additional libraries or components
* Creating (type of software) project.
* Overview of the (type of software).

## Additional libraries or components

To create the (tutorial) software you will be making use of a number of additional libraries not included in the LinkIt (version) SDK. Obtain and install these components as follows:

* (Library or component name)  
  Description, with links, of where to obtain the component,

## Start your (software) project

(Basic introduction to creating software/app project with references to get started or other suitable content with details. Include at least one screenshot showing the initial project in the appropriate IDE.

Screenshot showing the initial project

Connecting the (component)

## Overview of the (type of software) software

To create the device (description), a (type of software) is implemented, verified and uploaded to the LinkIt (version) development board. The source code is provided in this GitHub repository (add link).

The content of a (software) is as follows:

(Example for a sketch

* Definitions of header files.
* Definitions of variables.
* A setup() function that initializes resources, such as the (name/list) module(s).
* A loop() function that continuously listens to and processes events from hardware and software modules such as those for (name/list). The loop() function runs forever — until the device is shutdown. )

## Writing your software

(Intro as needed)

### Software writing task 1 – e,g. “Add the header files for the supporting libraries”

(Overview – support with structure diagrams or similar as appropriate)

#### Sub task (1a) e.g. Add SPI libraries

(Description of code requirements followed by code snippet

|  |
| --- |
| Code snippet |

More details about these libraries can be found in (name of guide with hyperlink).)

### Software writing task 2 etc. as needed

# Run your application

(Provide any instructions on running the software for the first time and examples of the output the user would expect to see.)

# Your next steps

(Provide the user with a summary of what they have achieved and a list of resources they might want to references for more details, e.g. API reference, or further learning, e.g. related tutorials).