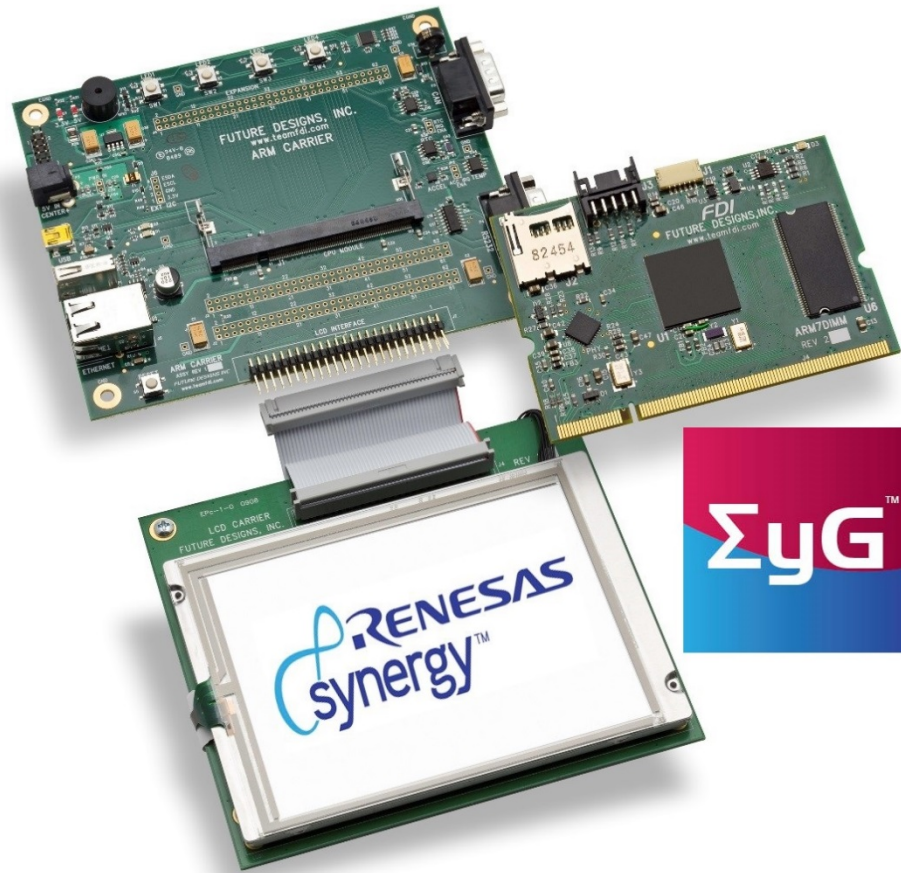


# Quick Start Guide

## ΣYG-S7G2-70C-MDK



**FDI** *Future Designs, Inc.*  
*Your Development Partner*  
996 A Cleaner Way, Huntsville, AL 35805

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## 1.0 Introduction

The Future Designs, Inc. ΣyG™ Family provides a complete and qualified Graphical User Interface (GUI) / Human Machine Interface (HMI) platform for the rapid release of customer products. The core of ΣyG (pronounced, “sig”) is Renesas Synergy™ – a comprehensive and integrated software-based microcontroller platform. FDI adds the Synergy platform to its GUI hardware, systems and production expertise. The end result is a sum of high-quality products that provide a robust and proven source for GUI and HMI solutions:

**ΣyG = Renesas Synergy+ GUI**

The ΣyG-S7G2 Modular Development Kit for the System on Module is the gateway for beginning Renesas Synergy™ projects. The ΣyG-S7G2 Modular Development Kit is compatible with FDI’s ΣyG Modular Development LCD Kits but can be used independently as a lower cost option for those embedded applications without the need for a touch screen display. FDI offers low cost customization services for customer specific hardware, software or packaging applications at volumes of 500 units or more.

**For the latest version of the Quick Start Guide visit [TeamFDI.com/ΣYG](http://TeamFDI.com/ΣYG).**

The logo for Future Designs, Inc. (FDI) consists of the letters "FDI" in a bold, italicized, sans-serif font. The "F" and "D" are connected, and the "I" is separate. The color is a dark red or maroon.

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## 2.0 Kit Contents

- ΣYG-S7G2-SOM
- Carrier Board
- LCD Carrier Board
- 7.0" WQVGA PCAP Touch Screen LCD
- 5V DC Center Positive 2A Power Supply
- SEGGER J-Link™ Lite Cortex-M Probe with keyed Ribbon Cable
- USB Flash Drive
- 3 ft. CAT5 Ethernet Cable
- Two USB Type A to USB Type Mini-B Cables
- Quick Start Guide
- microSDHC card

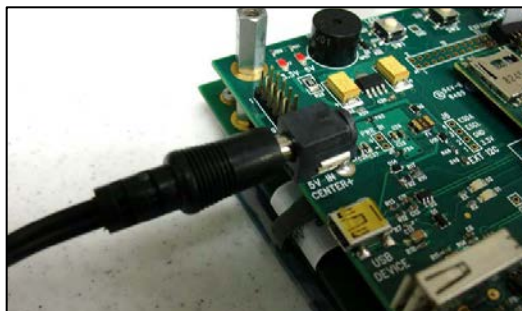
## 3.0 Software Installation

To install the tools, follow these steps:

- Download the latest version of the e<sup>2</sup> studio ISDE from <https://synergygallery.renesas.com/>.
- Download the latest version of the SSP from <https://synergygallery.renesas.com/>.
- Follow the latest installation instructions provided on the Synergy Gallery to install ISDE, then SSP software.

## 4.0 Startup Procedure

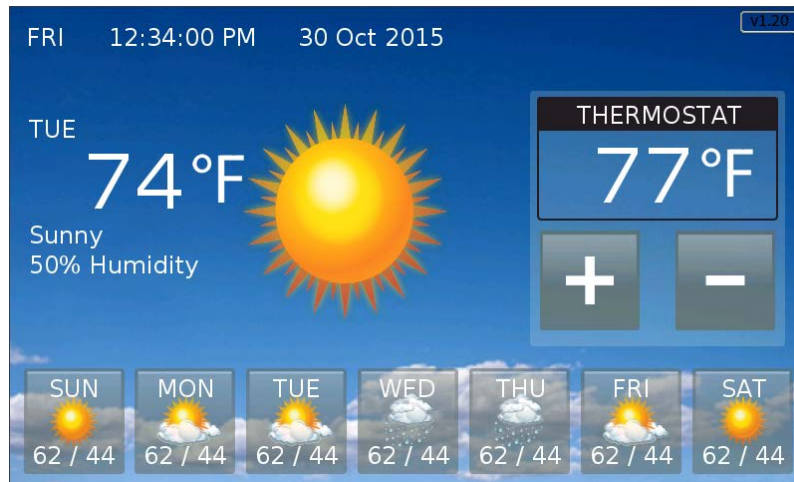
To power the boards and run the demonstration software, connect the provided 5V power supply to the ΣYG-S7G2-70C-MDK kit. The device will start up and will load the demo program from the internal flash. The weather panel demo will appear on the LCD screen.



## 1.0 Weather Panel Demo

The weather panel demo is detailed in the following application note “Weather Panel Application Getting Started Guide” which is available on the Synergy Application Notes page (<http://www.teamfdi.com/syg#syg-appnotes>). This demo begins by showing a splash screen. Next it switches to a weather forecast screen. On this screen, each of the days can be touched to change the displayed weather information for that day of the week. In addition, the thermostat buttons can be used to change the displayed temperature. This demo shows Alpha Blending, JPEG decoding, and GUIX APIs among other things.





## 2.0 Useful Links

- ΣyG-S7G2 7.0” PCAP Modular Development Kit Product Page: <http://www.teamfdi.com/product-details/syg-s7g2-70C-mdk/>
- Synergy Application Notes: <http://www.teamfdi.com/syg#syg-appnotes>
- Future Designs Inc. Forums: [http://www.teamfdi.com/?post\\_type=forum](http://www.teamfdi.com/?post_type=forum)
- Renesas Synergy: <https://synergygallery.renesas.com/>
- Renesas Forums: <http://www.renesasrulz.com/>
- SEGGER J-Link Lite Cortex-M: <https://www.segger.com/jlink-lite-cortexm.html>

