# ASEK-1335-T-KIT Quick Guide

The ASEK-1335-T-KIT as described below is for the purpose of evaluating the A1335 device.

**ASEK-1335-T-KIT Bill of Materials**

- ASEK-20 Kit (Part # 85-0540-600)
    - ASEK-20 Chassis with main Motherboard inside (85-0540-004)
    - USB Communications Cable
    - DC Power Supply/Cable with AC Outlet Adapters
    - Proto Board ( Part # 85-0540-103)
    - Ribbon Cable (Part # 85-0540-300)
- ASEK-1335-SUBKIT-T:
    - A1335 Daughterboard (Part #: 85-0540-109 / Stenciled A1332)
    - A1335 Socketed single die grand-daughter board (Part #: 85-0723 / Stenciled ASEK1335-SD)
    - A1335 Socketed dual die grand-daughter board (Part #: 85-0716)



| Figure 1. ASEK-20-T--KIT | Figure 2. ASEK-1335-SUBKIT-T |
|---|---|
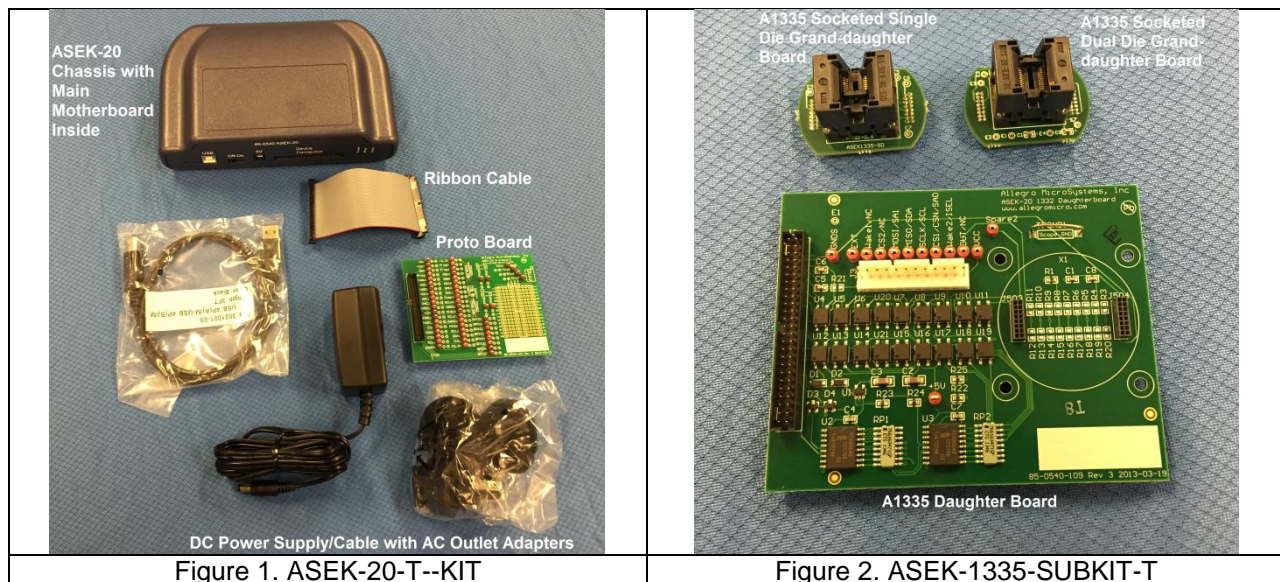
**Instructions for Configuring ASEK-1335-T-KIT with Device On-Board**

1. Connect one end of the USB communications cable to a personal computer
2. Connect the other end of the USB communications cable to the "USB" port on the ASEK-20 chassis
3. Connect the ribbon cable to the J2 connector on the daughterboard (85-0540-109)
4. Connect the other end of the ribbon cable to the "Device Connection" port on the ASEK-20 chassis
5. Mount the socketed grand-daughterboard (either 85-0723 or 85-716) onto the daughter board (85-0540-109)

6. Connect the DC Power Supply/Cable to the 5V port on the ASEK-20 chassis
7. Plug in the DC Power Supply to a 110V/220AC 60/50Hz outlet with the proper adapter
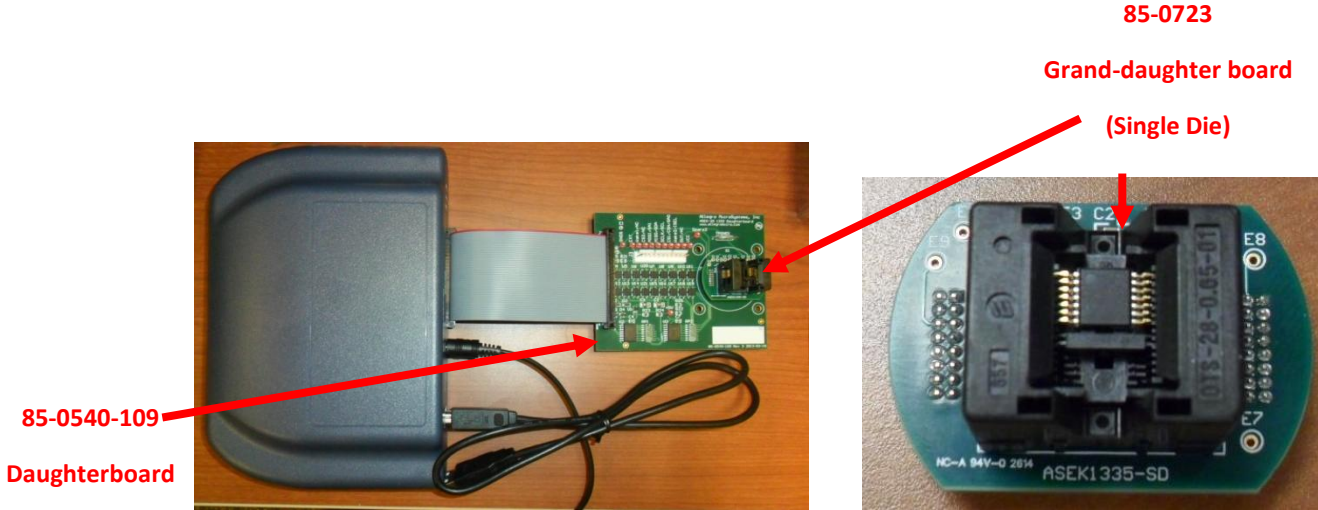8. Place A1335 device in grand-daughter board (85-0676) socket

**85-0723**

**Grand-daughter board**

**(Single Die)**

**85-0540-109**

**Daughterboard**

Figure 3. Setup of ASEK-1335-T-KIT

**Configuring ASEK-1335-T-KIT for Off-Board Prototyping**

The A1335 daughterboard allows off-board connections via a 12-pin header, seen in Figure 4 as component J3. This connector may be used in evaluating external prototyping modules.
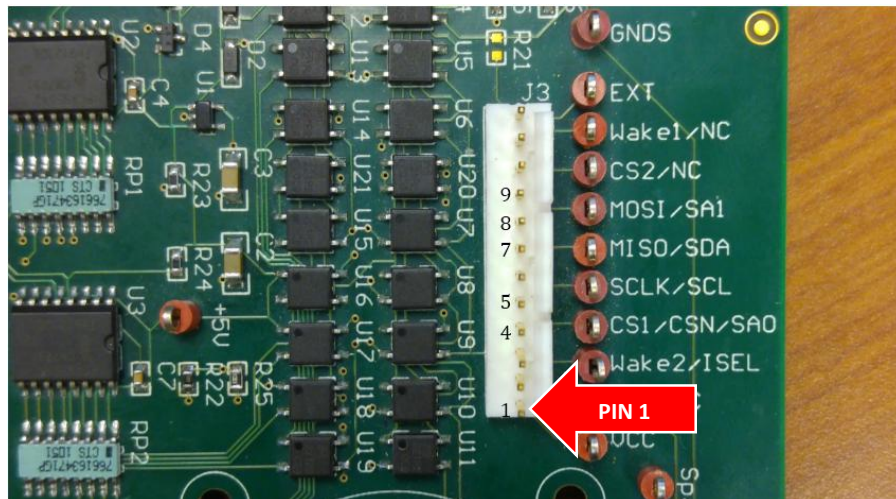
**PIN 1**

Figure 4. A1335 Daughterboard (85-0540-109, Rev 6), SPI Header Pins Labeled

1. Follow steps 1-4 of on-board configuration instructions
2. Using a ribbon cable or individual wires, connect the numbered pins on the header to the corresponding pins in the single-die sensor module. A wiring diagram for SPI communication is shown in Figure 5 below (see appendix for $I^2C$ and Manchester interfacing)
3. Connect the DC Power Supply/Cable to the 5V port on the ASEK-20 chassis
4. Plug in the DC Power Supply to a 110V/220AC 60/50Hz outlet with the proper adapter
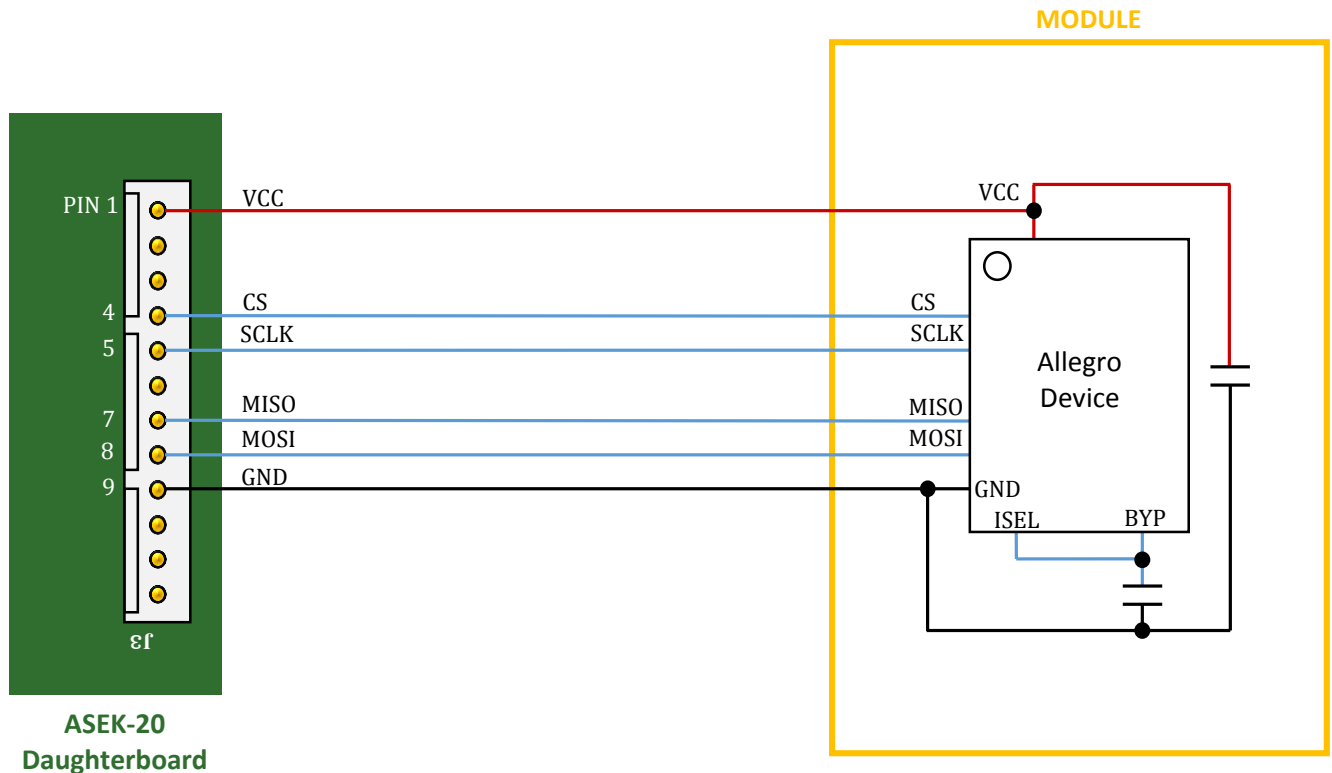


Figure 5. A1335 Daughterboard J3 Header Wiring Diagram (SPI Mode)

**Download Software GUI for ASEK-1335-T-KIT**
In order to download the programmer software, register through the software portal below:
https://registration.allegromicro.com/login

**ASEK-20 USB Driver**
If the appropriate COM port driver is not installed automatically, latest versions may be found on the FTDI website below:
http://www.ftdichip.com/Drivers/VCP.htm

**A1335 Sample Devices**
A1335 samples are not included with the ASEK-1335-T-KIT. Please contact your local FAE or factory for samples.

## Appendix

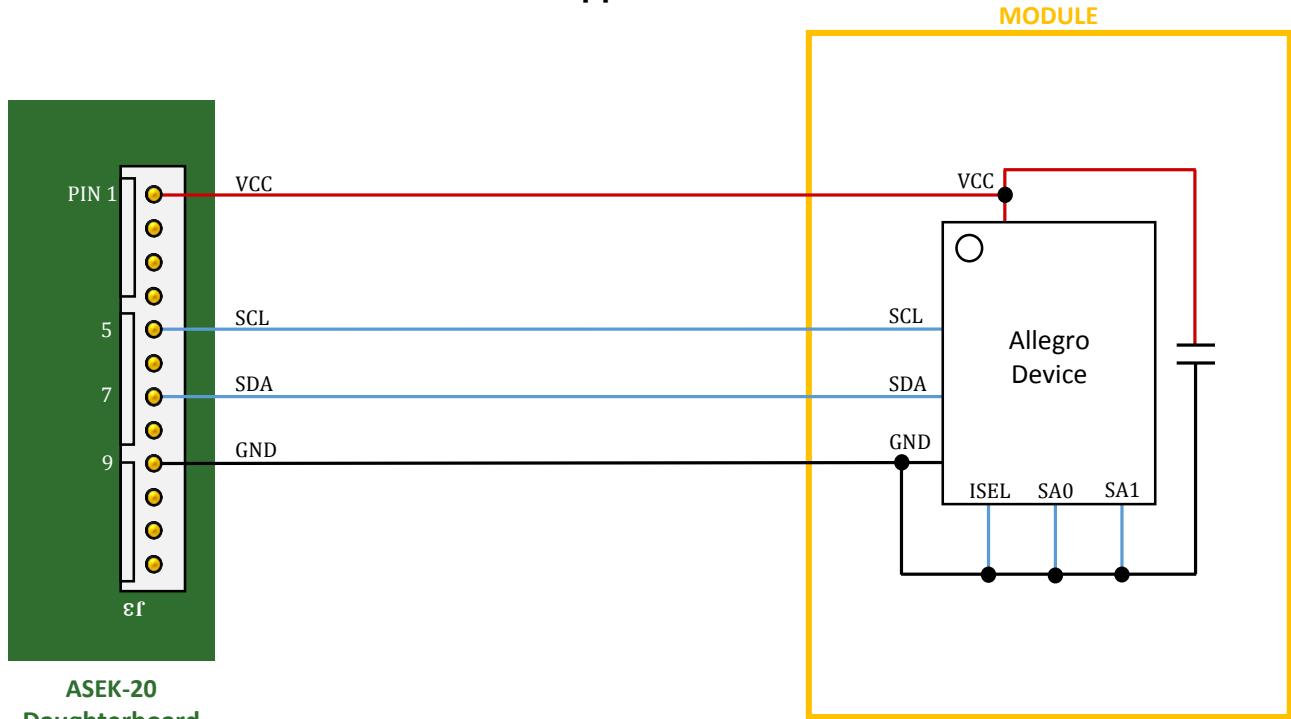

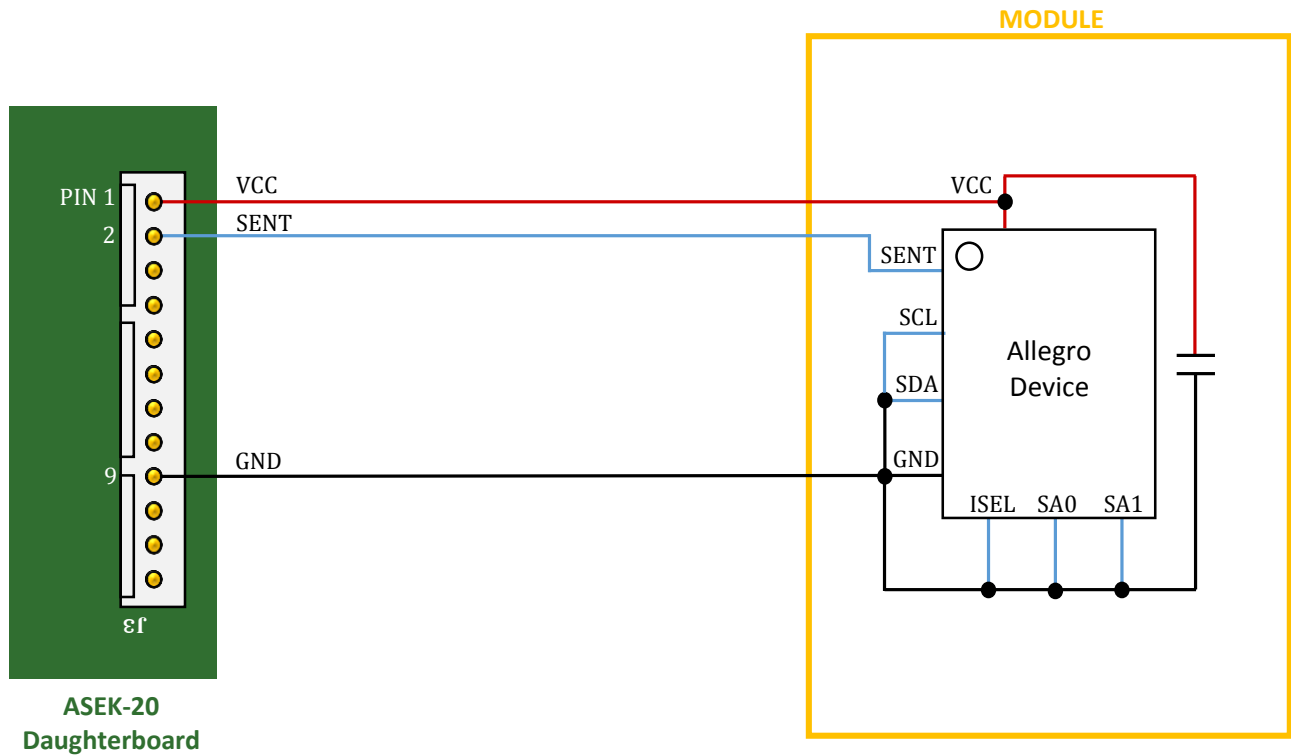Figure A-1. A1335 Daughterboard J3 Header Wiring Diagram (I$^2$C Mode)



Figure A-2. A1335 Daughterboard J3 Header Wiring Diagram (Manchester Mode)

**Revision History Table**

| Revision | Change Description | Res. | Page(s) | Date |
|----------|-------------------|------|---------|------|
| - | Original release | WW | All | 7/31/2014 |
| 1 | Removed line not applicable to A1335 | WW | 1 | 8/11/2014 |
| 2 | Added link for software portal and text edits | NK | | 3/30/2015 |
| 3 | Added J3 header configuration instructions and wiring diagrams; text edits | AR | All | 3/11/2016 |