General Description

The DS28E17 evaluation system (EV system) provides the special hardware and software system to exercise the features of the DS28E17 1-Wire®-to-I²C master bridge IC. The EV system consists of a DS28E17 EV kit board and a DS9481P-300# USB-to-1-Wire adapter for PC connectivity. The EV kit is compatible with Windows® operating systems.

EV System Contents

- DS28E17 EV Kit Board (Figure 1)
- DS9481P-300# USB-to-1-Wire Adapter (Figure 2)

Benefits and Features

Driver Support for Windows 8 and Windows 7

Evaluates: DS28E17

- Fully Compliant with USB Specification v2.0
- USB Powered with No External Power Supply Required
- On-Board DS7505 Digital Thermometer I²C Slave Peripheral
- Extended I²C Peripheral Module Connector for Rapid Prototyping of I²C Slaves
- Proven PCB Layout

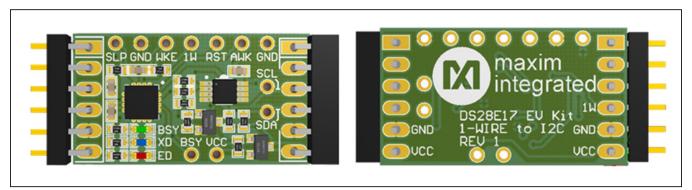


Figure 1. DS28E17 EV Kit Board

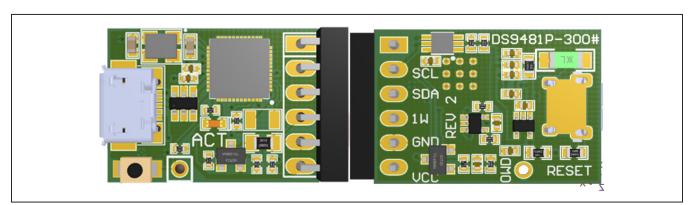


Figure 2. DS9481P-300# USB-to-1-Wire Adapter

1-Wire is a registered trademark of Maxim Integrated Products, Inc.

Windows is a registered trademark and registered service mark of Microsoft Corporation.

Ordering Information appears at end of data sheet.



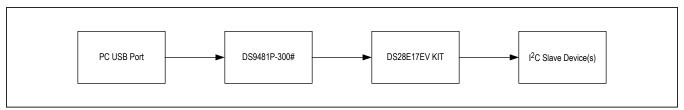


Figure 3. Typical Setup

DS28E17EVKIT Files

FILE	DESCRIPTION
DS28E17 EV Kit	EV Kit Software

Quick Start

Required Equipment

- DS28E17 EV kit (included)
- DS9481P-300# USB-to-1-Wire adapter (included)
- PC with a Windows 8 or Windows 7 (32-bit or 64-bit) operating system and a spare USB 2.0 or higher port
- 1-Wire drivers
- DS28E17 evaluation software

Note: In the following sections, software-related items are identified by bolding. Text in **bold** refers to items directly from the EV kit software. Text in **bold and underlined** refers to items from the Windows operating system.

Procedure

The EV kit is fully assembled and tested. Follow the steps below to verify board operation:

- Install the 1-Wire drivers (see the *Installing DS9481P-300# and 1-Wire Drivers* section for instructions).
- 2) Attach the DS9481P-300# adapter to the DS28E17 EV kit (Figure 4).
- Visit http://content.maximintegrated.com/en/design/tools/applications/evkit-software/ to download the latest version of the DS28E17 EV kit software.
- 4) Unzip and save the EV kit software to a known location.

- 5) Open the **DeviceDriver** folder.
- 6) Right-click on **install.bat** and then choose **Run** as administrator (Figure 5).

Evaluates: DS28E17

- 7) A command window opens with a prompt asking to install the device driver (Figure 6). Click **Install**.
- 8) Open the folder where the DS28E17 EV kit software was extracted and double-click the **Setup.exe** file.
- 9) Plug the USB cable to the DS9481P-300# adapter.
- 10) Insert the DS9481P-300# into a spare USB port on the PC.
- 11) The device will automatically search and install the driver (Figure 7).
- 12) Click on the **Install** button to start installation (Figure 9).
- 13) To start the evaluation software, ensure that the DS9481P-300# has been properly installed and the DS28E17 board and DS9481P-300# adapter are connected.
 - a. Run the DS28E17 EV kit software: Start \rightarrow Programs \rightarrow Maxim Integrated \rightarrow DS28E17EV Kit
- 14) If the DS9481P-300# is not detected or connected to the USB port, the software displays an error message (<u>Figure 10</u>). Close the program window, reconnect the DS9481P-300# adapter and restart the program again.
- 15) Once properly installed, the initial screen graphical user interface (GUI) should appear (Figure 11).

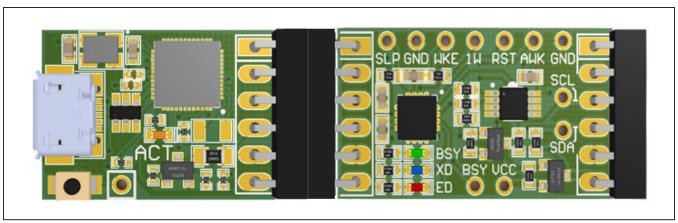


Figure 4. DS9481P-300 Attached with DS28E17 EV Kit

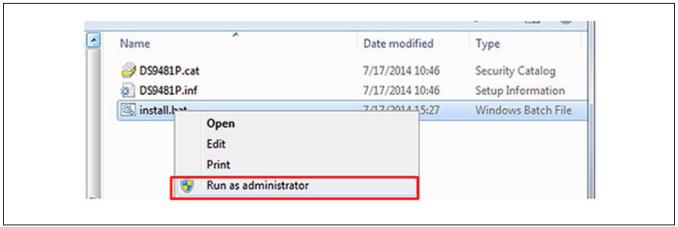


Figure 5. Device Driver Installation

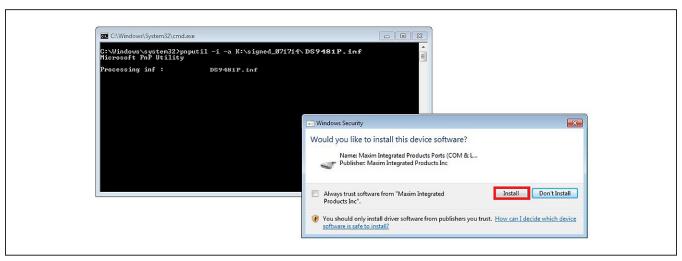
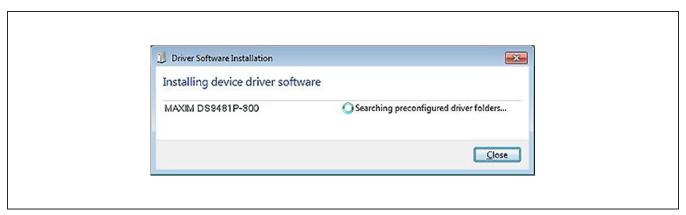


Figure 6. Device Driver (Install Device Software)



Evaluates: DS28E17

Figure 7. Device Driver Successfully Installed

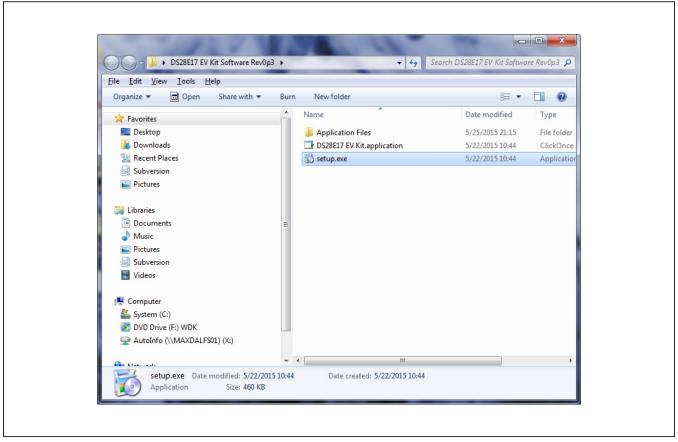
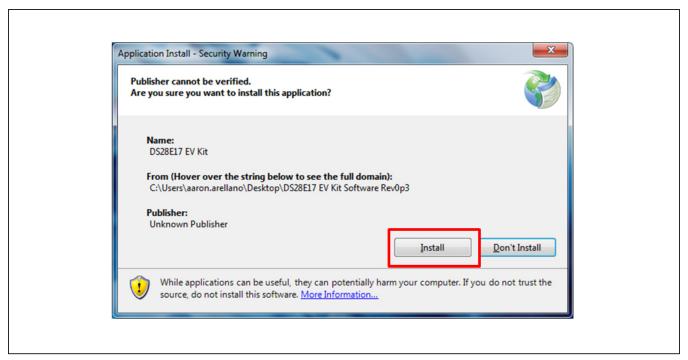


Figure 8. Opening the DS28E17 Evaluation Program Setup



Evaluates: DS28E17

Figure 9. DS28E17 EV Kit Application Install

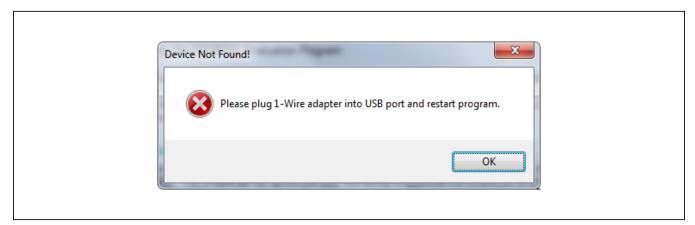
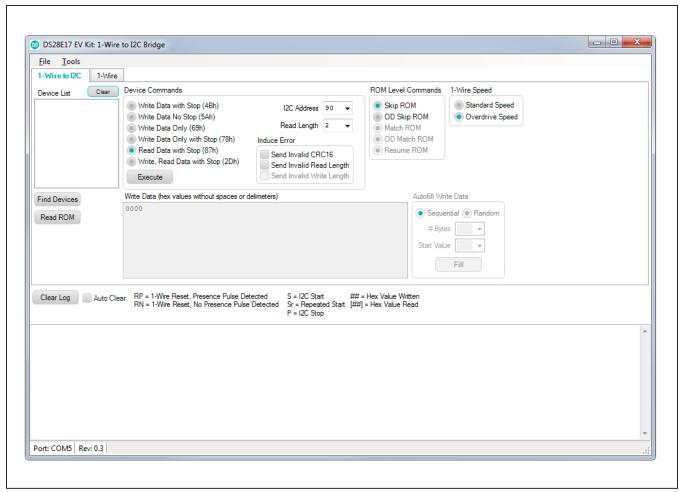


Figure 10. DS9481P-300# (Device Not Found!)



Evaluates: DS28E17

Figure 11. DS28E17 EV Kit Software Initial Screen GUI

Detailed Description of Software

The DS28E17 evaluation program user interface (Figure 12) has two tabs: **1-Wire to I2C** and **1-Wire**. The **1-Wire to I2C** tab (Figure 15) is the main tool to evaluate specific functions of the DS28E17. The **1-Wire** tab (Figure 16) provides 1-Wire communication functions down to the bit level. These functions allow manual creation of communication sequences beyond those found on the **1-Wire to I2C** tab.

File Menu Section

Exit closes the 1-Wire connection and exits the applications.

Tools Menu Section

The **Tools** menu provides all the connection information and settings required for 1-Wire transactions (Figure 13).

Read Device Revision returns the DS28E17 revision.

Evaluates: DS28E17

- The Set I²C Speed selection sets the device's I²C communication speed. The DS28E17 supports three different I²C speeds: 100kHz, 400kHz, and 900kHz
- Read I2C Speed reads the current I2C communication speed set on the device registry.
- Sleep: This selection makes the device go into sleep mode. After selecting this option, the device no longer responds to any command until a high-level signal is detected on the WAKEUP pin. See <u>Figure 14</u> for example log returns after **Sleep** condition.

The WAKEUP pin (shown as WKE) is located at the top of the EV kit board (Figure 1).

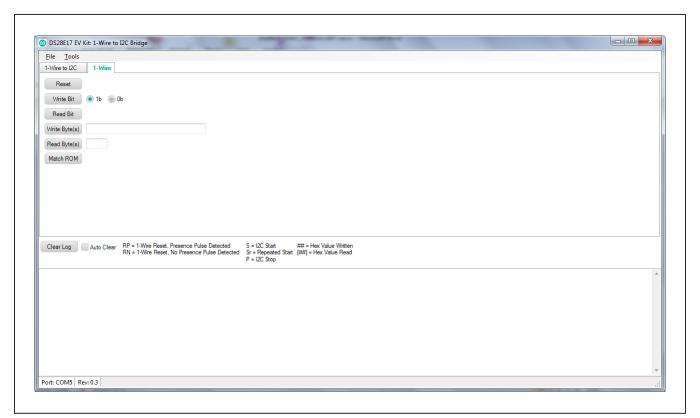


Figure 12. DS28E17 EV Kit Software, Main GUI Interface

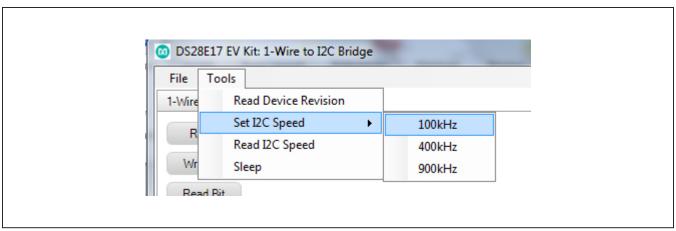


Figure 13. DS28E17 EV Kit Software GUI, Tools Menu

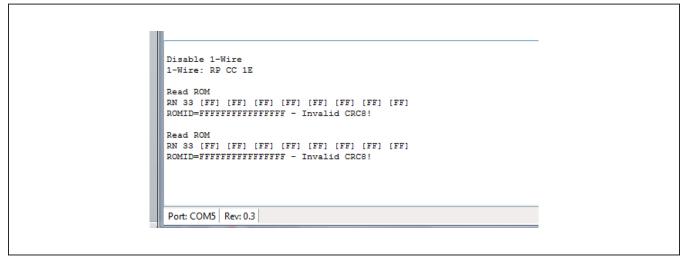


Figure 14. DS28E17 EV Kit Software GUI, Tools Menu (Sleep Condition Log Results)

1-Wire to I2C Tab

The 1-Wire to I2C tab (Figure 15) provides the following elements: Device List text box, Device Commands group box, ROM Level Commands group box, 1-Wire Speed group box, Find Devices and Read ROM buttons,

Write Data edit box, Autofill Write Data group box, and Log section. Details for each element are explained next. The Log section displays the 1-Wire and 1-Wire-to-I²C communication commands. See <u>Table 1</u> and <u>Table 2</u>.

Evaluates: DS28E17

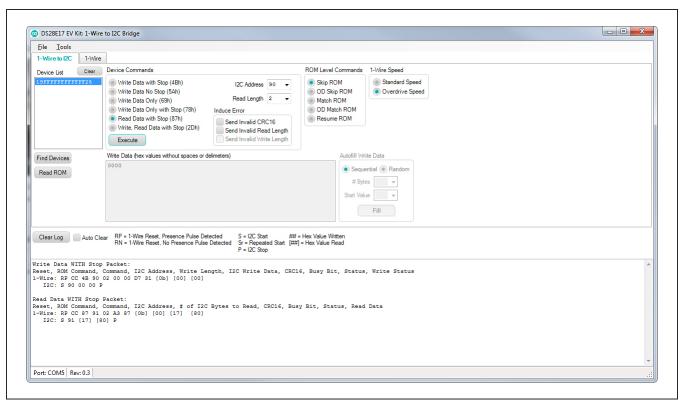


Figure 15. DS28E17 EV Kit Software GUI (1-Wire to I2C Tab)

Table 1. 1-Wire to I²C Options

ELEMENT NAME (TYPE)	PURPOSE	USAGE/SETTINGS
Device List (Text Box)	Display 1-Wire devices found	Displays the ROM ID for the attached devices on the 1-Wire bus. Used for Match ROM commands. Match ROM commands use the selected device under the Device List text box The data in this field is used with the ROM function action buttons to select a particular 1-Wire slave device. It is automatically filled when using the Find Devices button.
Find Devices (Action button)	Search for available devices attached to the 1-Wire line	Triggers the search command and adds discovered devices to the Device List text box.
Clear Log (Action button)	Clears the Log box	Clears all contents under the Log section.
Read ROM (Action button)	1-Wire command	Sends the 1-Wire reset followed by the Read ROM command (33h) and then reads the 64-bit ROM ID of the 1-Wire slave device. The CRC8 within the number is checked to validate the ROM IDs. A warning is logged if the CRC8 is not valid. The ROM ID is also loaded into the Device List text box to use with ROM commands.
Auto Clear (Checkbox)	Select if Log should be cleared each time a command is executed	This keeps a clean log, with only the last command executed displayed under the Log section.
Execute (button)	Executes the selected command	Issues the selected command to the DS28E17.

Table 2. Device Commands

ELEMENT NAME (TYPE)	PURPOSE	USAGE,SETTINGS
Write Data With Stop (4Bh) (Radio button)	I ² C Write command	Sends an I ² C packet command containing data and the stop command at the end of the data.
Write Data No Stop (5Ah) (Radio button)	I ² C Write command	Addresses and writes 1 to 255 bytes to an I ² C slave without completing the transaction with a stop. This command allows writing large amounts of data at one time when used in conjunction with the Write Data Only or Write Data Only with Stop device commands.
Write Data Only (69h) (Radio button)	I ² C Write command	Used when a start and I ² C address has previously been issued with a Write Data No Stop device command. This command writes 1 to 255 bytes to an I ² C slave without completing the transaction with a stop and enables writing large amounts of data at one time when used with the Write Data Only or a last Write Data Only with Stop device commands.
Write Data Only with Stop (78h) (Radio button)	I ² C Write command	Used when a start and I ² C address has previously been issued with a Write Data No Stop device command. This command writes 1 to 255 bytes to an I ² C slave, completing the transaction with a stop.
Read Data with Stop (87h) (Radio button)	I ² C Write command	This is used to address and read 1 to 255 bytes from an I ² C slave in one transaction.
Write, Read Data with Stop (2Dh) (Radio button)	I ² C Write command	This is used to first address and write 1 to 255 bytes to an I ² C slave. Secondly, it addresses and reads 1 to 255 bytes from an I ² C slave and issues a stop.
I ² C Address (Combo box)	I ² C Slave address selection	To select the address of the I ² C slave device for each transaction.
Read Length (Combo box)	Selection of bytes to read	Provides the total number of bytes desired to read. Option is disabled until a Read Data option is selected.
Induce Error	To test DS28E17 I/O states	This option includes three different error states to help monitor the device I/O pin states for each error (Invalid CRC16, Invalid byte length, and Invalid Write length). This selection helps the user understand the DS28E17 behavior after each error. For I/O states for each error, refer to the DS28E17 IC data sheet.

Table 3. 1-Wire Speed

ELEMENT NAME (TYPE)	PURPOSE	USAGE/SETTINGS
Standard Speed (Radio button)	1-Wire Speed	Indicates 1-Wire communication speed. The selected speed is also applicable when user selects the 1-Wire tab.
Overdrive Speed (Radio button)	1-Wire Speed	Indicates 1-Wire communication speed. The selected speed is also applicable when user selects the 1-Wire tab.

Table 4. Autofill Write Data

ELEMENT NAME (TYPE)	PURPOSE	USAGE/SETTINGS
Sequential (Radio button)	Write Data fill selection	Fills the Write Data edit box with bytes in a sequential order. Requires user to select the # Bytes to be written and the Start Value .
Random (Radio button)	Write Data fill selection	Fills the Write Data edit box with bytes in a random order. Requires user to select the # Bytes to be written and the Start Value .

Table 5. ROM Level Commands

ELEMENT NAME (TYPE)	USAGE/SETTINGS
Skip ROM (Radio button)	Sends a 1-Wire reset followed by the CCh Skip ROM command. This selects all devices on the 1-Wire bus.
OD Skip ROM (Radio button)	Sends a 1-Wire reset followed by the 3Ch Overdrive Skip ROM command. This sets all devices on the 1-Wire bus to Overdrive speed. The 1-Wire Speed section will display the current device's speed. The ROM Level commands will display the next available command. To bring back device to standard speed under the 1-Wire Speed, select Standard Speed.
Match ROM (Radio button)	Sends the 1-Wire reset followed by the Match ROM command 55h followed by the 8 bytes of the ROM ID in the ROM to use with ROM commands. Requires to previously use the Find Devices button to read device ROM ID and use the selected ROM ID for the match rom sequence.
OD Match ROM (Radio button)	Sends the 1-Wire reset followed by the Overdrive Match ROM command (69h), followed by the 8 bytes of the ROM ID in the ROM to use with ROM commands. Requires to previously use the Find Devices button to read device ROM ID and use the selected ROM ID for the match ROM sequence. The initial selection will set the device in overdrive speed. The 1-Wire Speed section displays the current device's speed. The ROM Level Commands displays the next available command. To bring back device to standard speed under the 1-Wire Speed , select Standard Speed .
Resume ROM (Radio button)	Sends a 1-Wire reset followed by the Resume command A5 (hex).

1-Wire Tab

The **1-Wire** tab (<u>Figure 16</u>) provides the low-level 1-Wire primitives that can be used to construct any 1-Wire communication sequence. Choices made in the **1-Wire Speed** group box under the **1-Wire to I2C** tab (**Standard**

Speed and **Overdrive Speed** only) also apply to ROM-level functions. The **ROM Level** section has functions that implement the 1-Wire ROM function commands, which use the 64-bit ROM ID selected under the **Device List** in the **1-Wire to I2C** tab.

Evaluates: DS28E17

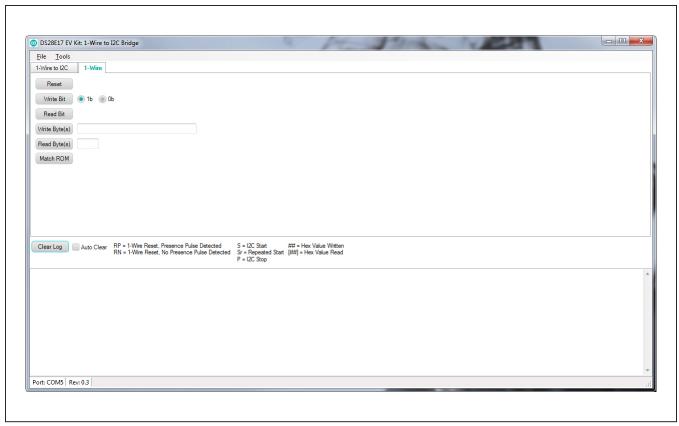


Figure 16. DS28E17 EV Kit Software GUI (1-Wire Tab Functions)

Table 6. 1-Wire Tab

ELEMENT NAME (TYPE)	DESCRIPTION
Reset (Action button)	Generates a 1-Wire reset at the speed specified in the toggle button.
Write Bit (Action button)	Generates a write time slot on the 1-Wire bus. Bit sent is specified in the logic 1 (1b) or logic 0 (0b) toggle button.
Read Bit (Action button)	Generates a read-data time slot on the 1-Wire bus.
Write Byte(s) (Action button)	Transmits the bytes displayed in the Write Bytes data input box on the 1-Wire bus.
Read Byte(s) (Action button)	Reads as many bytes from the 1-Wire bus as specified by the Number of Bytes to Read counter.
Standard Speed/ Overdrive Speed (Toggle button)	Defines the speed to be used for 1-Wire communication.

CODE	1-WIRE ACTIVITY	DESCRIPTION
RP	Presence Pulse Detected	The 1-Wire master generates a Reset pulse and receives a Presence pulse.
RN	No Presence Pulse Detected	The 1-Wire master generates a Reset pulse and does not receive a Presence pulse.
S	None	I ² C Start
Sr	None	Repeated Start
Р	None	I ² C Stop
##	None	Hex value written
[##]	None	Hex value read

DS7505 I²C Temperature Sensor Example

The EV kit board includes a DS7505 I²C sensor for demo purposes. Additional I²C devices can also be attached to the end of the DS28E17 board.

The DS7505 IC data sheet is available for download at www.maximintegrated.com.

Reading Temperature from DS505

Follow the steps below to read temperature from the DS505:

- 1) Click the Find Devices button.
- In the Device Commands group box, click the Write Data with Stop (4Bh) radio button.
- 3) In the **I2C Address** combo box, type or select **90** to set the I2C slave address to 90h.
- 4) Inside the Write Data edit box, type 0000.
- 5) Click the **Execute** button.
- 6) The **Log** section will display the 1-Wire and I²C transaction.
- 7) In the **Device Commands** group box, click the **Read Data with Stop (87h)** radio button.

- 8) The **Read Length** combo box is enabled.
- 9) Type or select 2 to set the read length to 2 bytes.

Evaluates: DS28E17

10) For more information regarding temperature readings, refer to the *Operation—Measuring Temperature* section in the DS2705 IC data sheet.

Temperature Readings Results

- Four bytes are returned on the 1-Wire line. These bytes represent the Status byte, Write Status, and two I²C bytes from the device. Refer to the DS28E17 IC data sheet for more details.
- The two I²C bytes received ([17] [80]) denote the device temperature, 23.5°C (see Figure 15).
- The DS7505 power-up default is configured for 9-bit resolution.
- 1780h in binary represents 0001 0111 1000 0000. Following Figure 17, the temperature can be calculated.

The DS7505 IC data sheet provides exact temperature calculation procedures and device-specific operation.

Other I²C devices can be read using the extension port on the DS28E17 EV kit boards. See Figure 1 for pin selection.

MS Byte	Bit 15	Bit 14	Bit 13	Bit 12	Bit 11	Bit 10	Bit 9	Bit 8
MS Byte	S	26	25	04				
			23	24	23	22	21	20
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
LS Byte	2-1	2-2	2-3	2-4	0	0	0	0

Figure 17. Temperature Reading Registry

Detailed Description of Hardware

DS28E17 EV Kit Component List, PCB Layout, and Schematic

See the following links for component information, schematic diagrams, and PCB layouts:

- DS28E17 EV kit BOM
- DS28E17 schematic
- DS28E17 PCB
- DS9481P-300 BOM
- DS9481P-300 schematic
- DS9481P-300 PCB

Table 8. DS28E17 EV Kit Pinout

SIGNAL NAME	DESCRIPTION
SLP	Input pin to place the device into sleep mode
GND	Ground
WKE	Input pin to wake the device after the sleep command
1W	1-Wire I/O pin
RST	Input reset device
AWK	Output pin to enable the external I ² C device
BSY	I ² C busy pin
SDA	I ² C data output pin
SCL	I ² C clock output pin
VCC	I ² C V _{CC} Output

Table 9. PCB Layout Diagrams (Color Legend)

COLOR	DESCRIPTION
Red	Top metal layer
Green	Top silkscreen
Brown	Bottom silkscreen
Blue	Bottom metal layer
Grey	All metal layers
Purple	Board outline

Ordering Information

PART	TYPE
DS28E17K#	EV System

Evaluates: DS28E17

#Denotes RoHS compliant.

Troubleshooting Guide

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION	
Cannot communicate through the 1-Wire adapter	PC port hardware is not functioning properly.	Does the port work with other applications, such as a keyboard or mouse? If not, contact the motherboard vendor for BIOS updates or new drivers.	
	1-Wire adapter is not functioning.	Try the 1-Wire adapter on another PC. If the problem persists, use a different 1-Wire adapter or order a new adapter of this type.	
	Adapter type selected is not what is connected.	Run the Default 1-Wire Net application and select the correct adapter type and/or port number.	

Evaluates: DS28E17

Appendix A: Extended Setup Guide

Installing the DS9481P-300# and 1-Wire Drivers

The DS9481P-300# adapter also requires 1-Wire drivers to operate the 1-Wire port. Unless you have been using 1-Wire devices before (e.g., with a different adapter), the drivers need to be installed before this EV kit can function. Follow the steps below to install the 1-Wire Drivers software package. For installation details, refer to Tutorial 4373: OneWireViewer and iButton Quick Start Guide, available at www.maximintegrated.com/en/app-notes/index.mvp/id/4373.

- To download the 1-Wire Drivers software package, visit www.maximintegrated.com/en/products/comms/one-wire/software-tools/drivers.html.
 Click the button that takes you to the Download Page. Select the applicable version of the Windows operating system and select the file that corresponds to your PC's configuration (e.g., 32-Bit 1-Wire Drivers or 64-Bit 1-Wire Drivers) and then click the Download button. The web page provides assistance on how to detect whether your PC runs a 32-bit or 64-bit operating system.
- 2) Select Run when prompted with the question Do you want to run or save this file?
- 3) Select **Run** when you get a security warning that reads **Do you want to run the software?**
- 4) Read and check the box if you accept the license agreement. Click **Install**.
- 5) Click the Finish button to exit the Setup Wizard.
- 6) Now return to the Procedure section and execute Step 2.

Revision History

REVISION NUMBER	REVISION DATE	DESCRIPTION	PAGES CHANGED
0	6/15	Initial release	_

For pricing, delivery, and ordering information, please contact Maxim Direct at 1-888-629-4642, or visit Maxim Integrated's website at www.maximintegrated.com.

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Evaluates: DS28E17

DS28E17 EV Bill of Materials (BOM) (Rev 0, 6/15) Color legend --> 0805 capacitor 1206 capacitor Leave Blank 60 characters This section will be deleted prior to Data Base upload Eff Start Eff Close To Issuing Remarks # of Manufacturer TTL KITTED DELTA Date Date Seq Store Designators) Char Part Number Part OTY Parent Item Component Component RoHS/L * = Sampled Description Description Status Per Assembly Notes Y = Component Datasheet URL OK DS28E17EVKIT# DS28E17 EV Kit DC20E17EV/VIT# DC20E17EV/VIT# Batangas to procure Part Number Datasheet URL 0004 LED INGAN GREEN CLEAR 0603 SMD 20 D1 OK 598-8081-107F 350-2036-1-ND http://media.digikey.com/pdf/Data%20Sheets/Dialight%20PDFs/598 Series 0603 Pkg.pdf 20 D2 OK LB Q39G-L2N2-35-1 0005 LED CHIPLED BLUE 470NM 0603 SMD (20) 475-2816-1-ND http://media.digikey.com/pdf/Data%20Sheets/Osram%20PDFs/LB_LT%20Q39G.pdf OK LTST-C193KRKT-5A http://optoelectronics.liteon.com/upload/download/DS22-2005-077/S_110_LTST-C193KRKT-5A.pdf LED BED BECT CLEAR OGGS 1 20 (20) D3 160 1920 1 ND 0007 EH0277 CONN HEADER . 100 SINGL R/A 6POS 20 OK PBC36SBAN S1111E-36-ND http://www.sullinscorp.com/catalogs/77_PAGE108-109_.100_MALE_HDR.pdf CONN RCPT .100" 6POS R/A SGL TIN 20 OK SSW-106-02-T-S-RA http://www.farnell.com/datasheets/1596304.pdf 0009 EQ1054 P-MOSFET - PMV65XP 20 OK PMV65XP.215 http://www.nxp.com/documents/data_sheet/PMV65XP.pdf 0010 EQ0745 MOSFET N-CH 50V 200MA SOT-23 20 Q2 OK BSS138LT1G http://www.onsemi.com/pub_link/Collateral/BSS138LT1-D.PDF (20) 0011 ER1077 RES SMD 0.0 OHM IUMPER 1/10W 60 (60) (80) R1 R4 R5 OK ERJ-3GEYOROOV PO OGTR-ND http://industrial.panasonic.com/www-cgi/jvcr13pz.cgi?E+PZ+3+AOA0001+ERJ3GEY0R00V+7+WW 3 80 R2 R3 R8 R9 0012 FR0506033301 RES SMD 3 3K OHM 5% 1/10W 0603 4 OK FRI-3GEYI332V P3 3KGTR-ND http://industrial.panasonic.com/www-cgi/jvcr13pz.cgi?E+PZ+3+AOA0001+ERJ3GEYJ332V+7+WW 0013 ER0506036801 RES SMD 6.8K OHM 5% 1/10W 0603 20 (20) OK ERJ-3GEYJ682V P6.8KGTR-ND http://industrial.panasonic.com/www-cgi/jvcr13pz.cgi?E+PZ+3+AOA0001+ERJ3GEYJ682V+7+WW 0014 ER0506031003 RES SMD 100K OHM 5% 1/10W 0603 40 (40) OK CRCW0603100KJNEA 541-100KGCT-ND http://www.vishay.com/docs/20035/dcrcwe3.pdf 0015 ER0506031001 RES SMD 1K OHM 5% 1/10W 0603 40 (40) OK CRCW06031K00JNEA 541-1.0KGCT-ND http://www.vishay.com/docs/20035/dcrcwe3.pdf CONN HEADER 1POS .100 VERT GOLD 220 WM50016-36-ND 0016 EH0072 11 (220)OK 0022284363 http://www.molex.com/pdm_docs/sd/022284363_sd.pdf OK 0017 1-Wire to I2C Master Bridge 1 20 (20) U1 Dallas will supply 0018 Digital Thermometer and Thermostat 20 (20) 112 OK DS7505U+ 0 0 OK 0 OK 0 0 0 0 OK 0 0 OK 0 0 OK 0 0 0 0 OK 0 0 OK 0 0 OK 0 OK 0 0 0 OΚ 0 0 OK 0 0 0 OK 0 0 OK 0 0 OK 0 0 OK 0 OK 0 0 0 0 OK 0 0 OK 0 0 ОК 0 0 0 0 OK 0 0 OK 0 0 OK OK 0 0 0 0 OK 0 OK 0 0 OK OK 0 0

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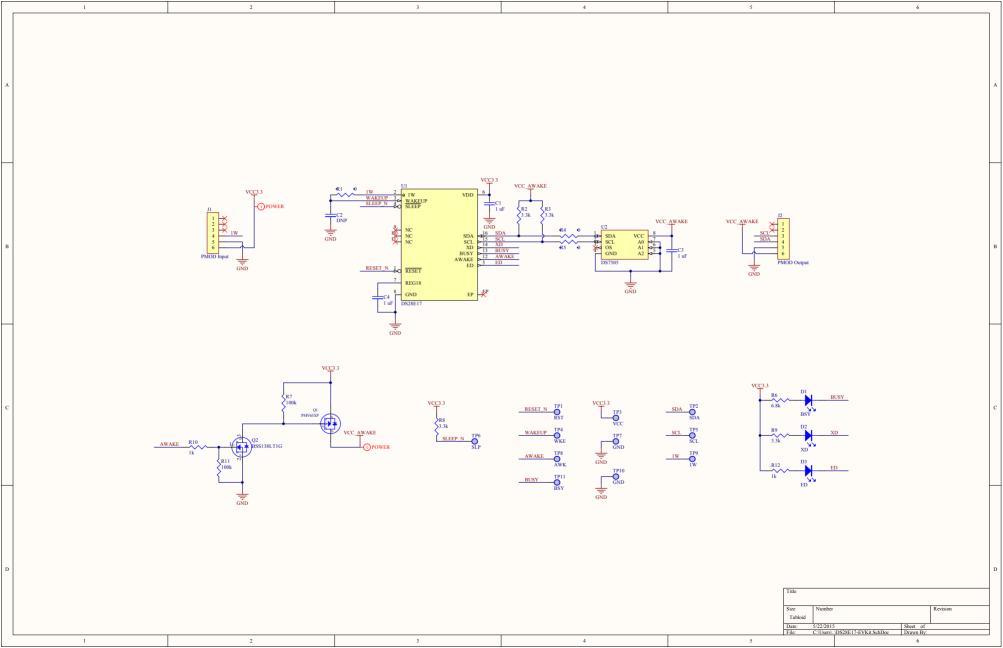
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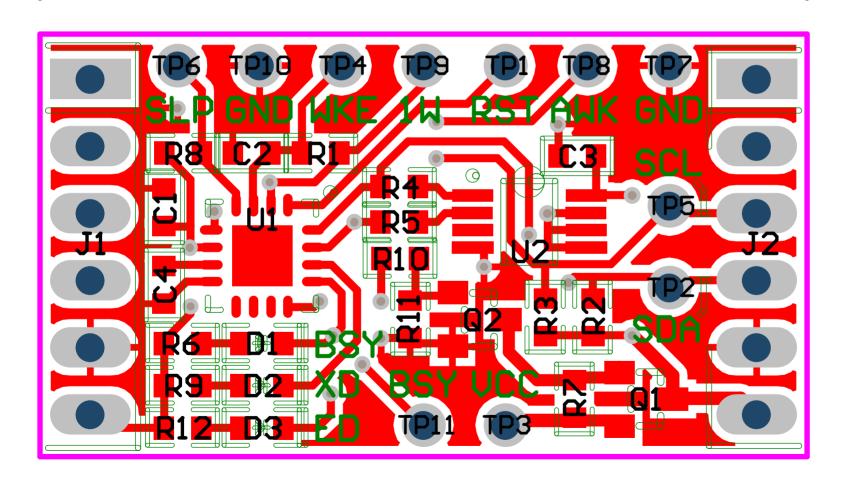
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25 characters Parent

Number







35 characters

Description

Parent

Prepared by:

25 characters

DS9481P-300#

Parent Number

Item Component

35 characters

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0003 EC14588 0004 EC0976

0005 EH1498

0006 ED1021 0007

0009 EQ0219

0010 EQ1054

0022 EH1032

0023 EH1359

0024

0025

0027

0028 0029

Color legend -->

35 characters

Component

Description

1206 capacitor

CAP CER 1UF 6.3V 20% X5R 0402

CAP CER 0.1UF 6.3V 10% X5R 0402

CONN RCPT STD MICRO USB TYPE B

LED ORANGE HIGH BRIGHT USS 0603

FERRITE CHIP 220 OHM 2200MA 0603

CONN RCPT .100" 6POS R/A SGL TIN

SWITCH TACTILE SPST-NO 0.05A 12V

40ns Single-Supply Comparator

4 Channel +/- 30kv ESD Protector

Security Token Microcontroller with RTC and USB

High PSRR, Low-Dropout, 150mA Linear Regulator

Dual High-Speed Differential ESD-Protection IC

CAP CER 10PF 50V COG 0603

N MOSFET - 2N7002

P-MOSEET - PMV65XP

0011 ER05060310R0 RES SMD 10 OHM 5% 1/10W 0603

0012 ER0504021501 RES SMD 1.5K OHM 5% 1/16W 0402

0013 ER0104021003 RES SMD 100K OHM 1% 1/16W 0402

0014 ER0104023242 RES SMD 32.4K OHM 1% 1/16W 0402

0015 ER0504024701 RES SMD 4.7K OHM 5% 1/10W 0402

0016 ER0504021001 RES SMD 1K OHM 5% 1/16W 0402

0017 ER0504022201 RES SMD 2.2K OHM 5% 1/10W 0402

0018 ER0104024990 RES SMD 499 OHM 1% 1/16W 0402

0019 ER0108054R99 RES SMD 4.99 OHM 1% 1/8W 0805 0020 ER0504026800 RES SMD 680 OHM 5% 1/10W 0402

PTC Fuse 1206

Part

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Status Per Date Date

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OK DS9481P-300#

1005X5R0J105M050BB

OK C1608C0G1H100D080AA

OK 10103594-0001LF

OK BLM18KG221SN1D

OK SSW-106-02-T-S-RA

OK CRCW04021K50JNED

OK CRCW0402100KFKED

OK CRCW040232K4FKEE

OK CRCW04021K00JNED

OK CRCW0402499RFKED

OK CRCW08054R99FKEA

OK ERJ-2GEJ472X

OK ERJ-2GEJ222X

OK ERJ-2GEJ681X

OK MF-NSMF012-2

OK MAXQ1010-A01+

OK MAX3207EAUT+

OK MAX13204EALT+

OK FA-238V 12.0000MB-K3

OK MAX9140AAXK+

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OK PMV65XP,215

OK C0603C104K4RACTU, C1005X5R0J1 445-1266-2-ND

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DC04910.200#

C1. C2. C4. C7. C9.

C3, C8, C10, C13

C11. C12

C5, C6

FB1, FB2

R10

Store

RoHS/I * = Sampled

Y = Component

Batangas to procure

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SA1-100KLCT-ND

P4.7KJTR-ND

P2.2KJTR-ND

P680JCT-ND

SW1020CT-ND

SER3682TR-ND

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541-499I CT-ND

541-4.99CCCT-ND

P13487CT-ND

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