Description

This document shows basic guidelines to use the Qorvo's Graphic User Interface software (GUI) to control the ACT88329 EVK or socketed board from a Windows-based PC with a Qorvo's USB-to-I^{2}C dongle.

GUI Setup

Install the Qorvo's USB-to-I^{2}C dongle driver by following the guide on "Qorvo GUI and Dongle Driver Installation.pdf" file. Plug the Qorvo's USB-to-I^{2}C dongle into PC's USB port and I^{2}C terminal to I^{2}C connector on ACT88329 EVK or Socketed board. Power up the EVK or Socketed board with an appropriate voltage, make sure the DUT started up properly.

In the GUI folder, open the "ACT88329 GUI Rev 0.1.exe" to invoke the software. Below screen would show up, make sure the USB-to-I^{2}C dongle is recognized by PC with status as below RED circle in **Figure 1** below.
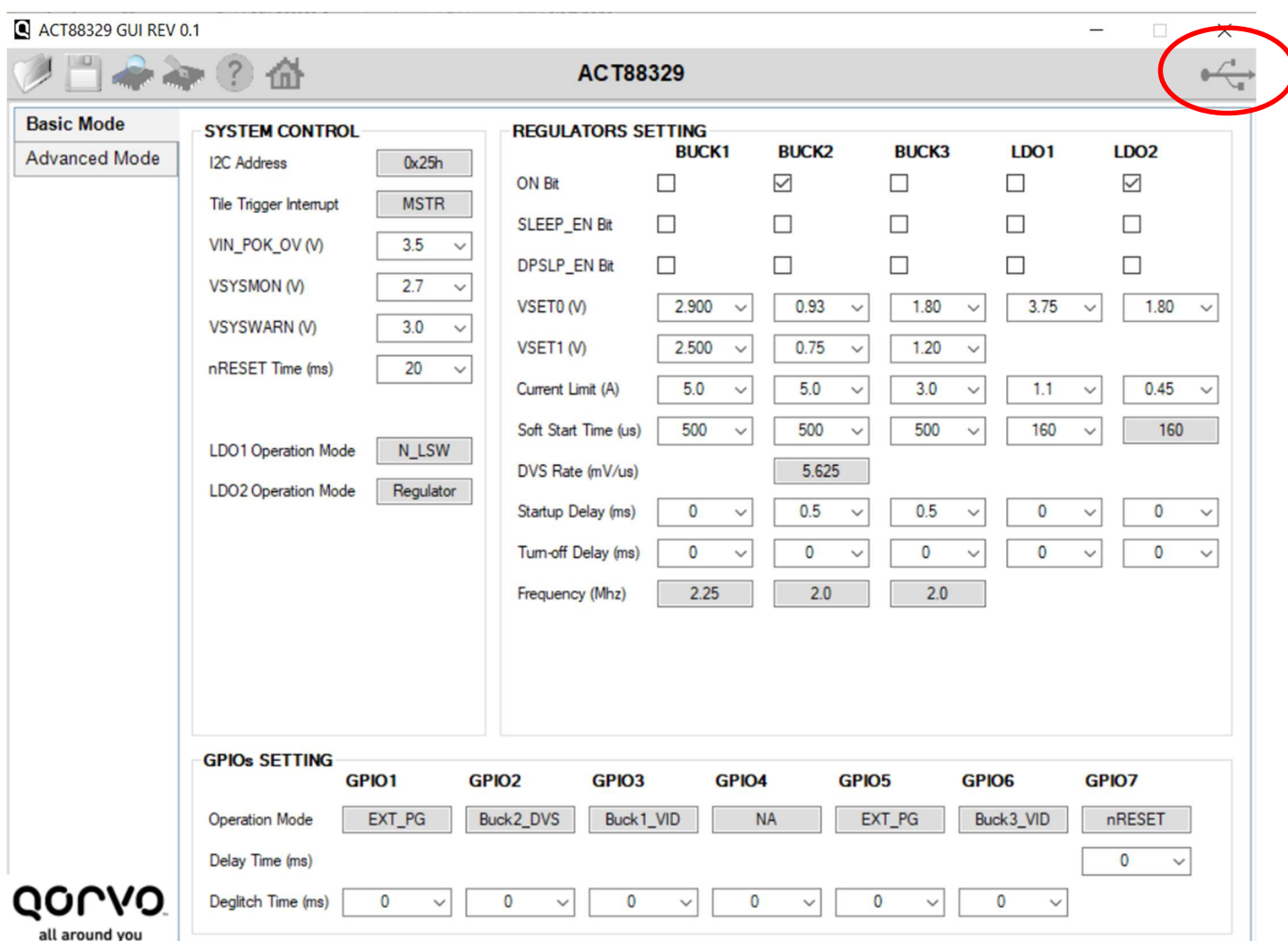

Figure 1: ACT88329 GUI

Operating Functions

The GUI has 4 functional buttons display as icons on top left corner, with order from left to right: Load, Save, Read, Write and EVK_Program as below **Figure 2**.

Figure 2: Functional Buttons

Open Function

Open function allows user to open an ACT88329's register information data.iact or .xml files. The file should be provided by Qorvo.

Save Function

Save function allows user can save the ACT88329 register information to an iact or .xml file. Qorvo recommends user to save the registers read back to an .iact file.

Read Function

Read function allows user to read all the I^{2}C registers of the ACT88329 under test (DUT) and update to the GUI. Qorvo recommend user always click "Read" after powering up the EVK or socket board.

Write Function

Write function will write all the setting on the GUI to a powered DUT. After changing value on the GUI, click "Write" button to transfer all setting to the IC via I^{2}C.

Read/Write Single Register

In Advanced mode, beside the "Write" button to write all I^{2}C registers, ACT88329 GUI also supports write or read a single register. **Figure 4** in page 4 demonstrates how to read or write to only one register, in this particular case is register 0x42. User point the mouse to the bit and right-click, a small "Read/Write" pop-up window will appear. User select "Read" to read only this register or select "Write" to write the value of this register to the IC.

Basic Mode

The GUI will startup in Basic Mode screen. In Basic Mode, user can easily change the register setting using options in drop-boxes or check/uncheck checkboxes. For checkboxes, Left click to check or uncheck checkboxes. For drop-boxes, Left-click to the small arrow next to the value then a selection popup will show up to display all possible option to choose from. User may need to scroll up/down to find the target value and left click to select it.

Example in **Figure 3** below, user click in to drop-box arrow to select the option as below to choose different LDO2 output voltage.
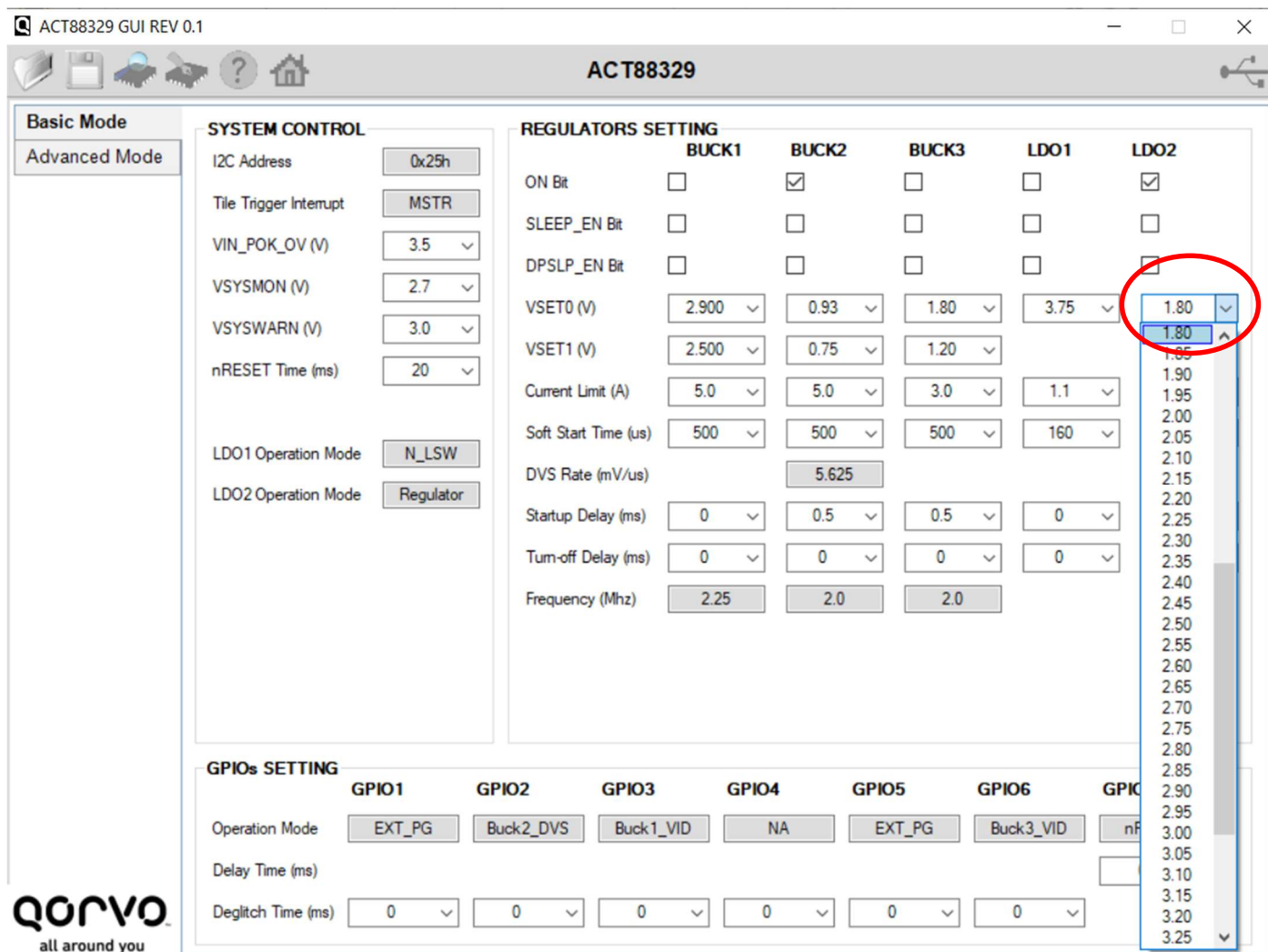

Figure 3: ACT88329 GUI Basic Mode

Advanced Mode

User can access to all I²C register in bit level by selecting the "Advanced Mode" tab. In Advanced Mode screen, registers are divided into tile-based groups. To change the registers, user select the corresponding tile then left click on the "bit name"

button to flip the bit value between "0" and "1". Refer to the ACT88329 datasheet for functionality of each bit. User is required to have fully understanding of each bit/register function.

Example in **Figure 4** below, user selects "Advance Mode", "Buck1", before right-clicking to write or read 0x42 register.
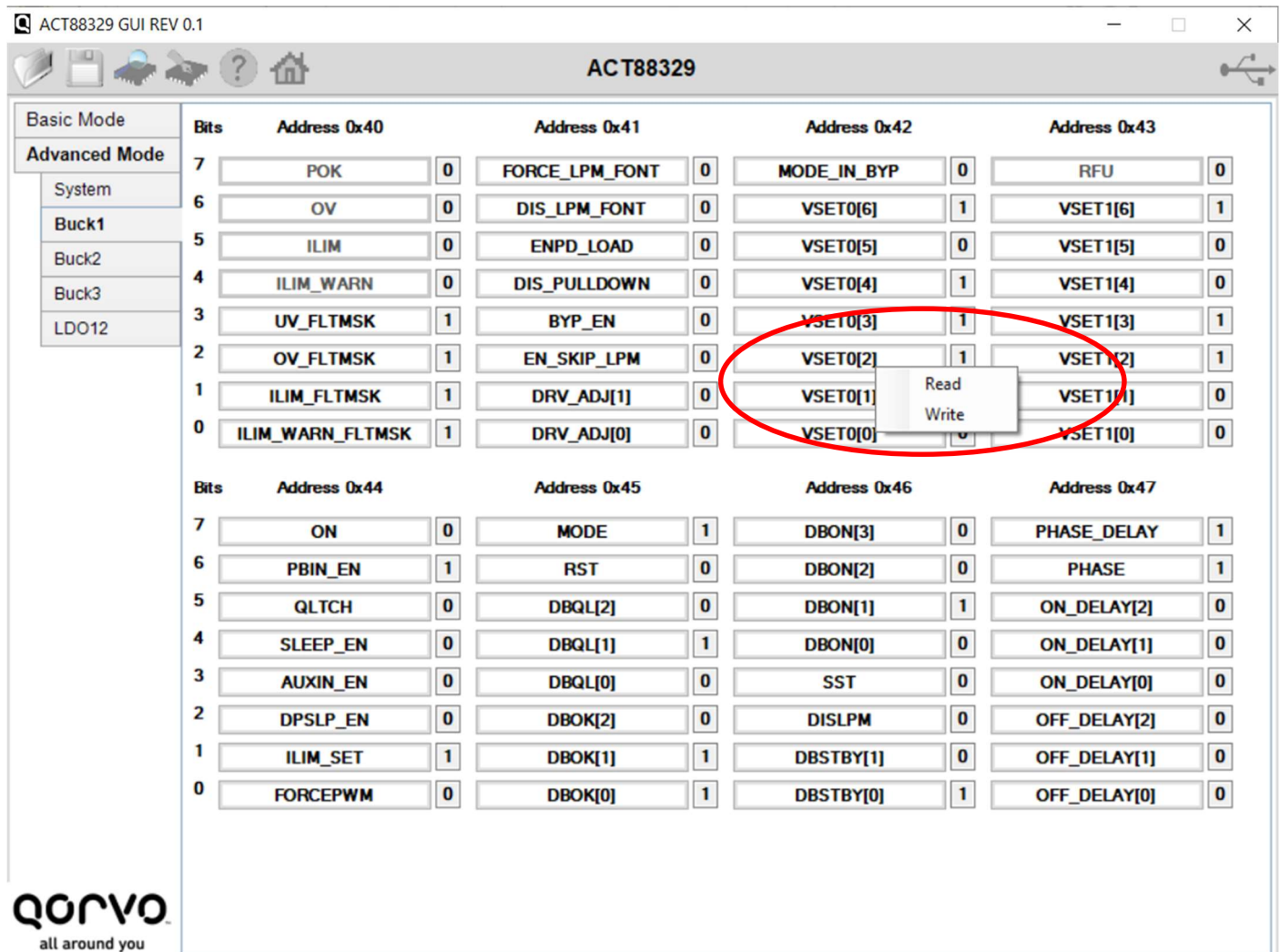

Figure 4: ACT88329 GUI in Advanced Mode

REVISION HISTORY

REVISION	DATE	DESCRIPTION
0.1	05-Aug-2020	Initiation

Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:
Web: www.qorvo.com
Email: customer.support@qorvo.com

Important Notice

The information contained herein is believed to be reliable; however, Qorvo makes no warranties regarding the information contained herein and assumes no responsibility or liability whatsoever for the use of the information contained herein. All information contained herein is subject to change without notice. Customers should obtain and verify the latest relevant information before placing orders for Qorvo products. The information contained herein or any use of such information does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights, whether with regard to such information itself or anything described by such information. **THIS INFORMATION DOES NOT CONSTITUTE A WARRANTY WITH RESPECT TO THE PRODUCTS DESCRIBED HEREIN, AND QORVO HEREBY DISCLAIMS ANY AND ALL WARRANTIES WITH RESPECT TO SUCH PRODUCTS WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**
Without limiting the generality of the foregoing, Qorvo products are not warranted or authorized for use as critical components in medical, life-saving, or life-sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.