**Quick Start Guide**

# MC56F83000 Evaluation Kit

# GET TO KNOW THE MC56F83000-EVK

Power/USB Port of DSC
Power/USB Virtual Serial Port
Power/ OSBDM USB

Adapter/ 5V Only

CAN Header

Reset

JM60 Bootloader Enable

J3 I/O Header

J2 I/O Header

J1 I/O Header

J4 I/O Header

SW4
SW5

SW2
SW3

User LEDs
PWM LEDs
JTAG Port

**Figure 1:** MC56F83000-EVK Callouts

NC-2
VDD-4
GD4/RESET-6
VDD-8
P5V-10
GND-12
GND-14
P5V_DC_IN-16

1-GC13
3-GG10
5-GE4
7-GE5
9-GE2
11-GE3
13-GE0
15-GE1

GA3-2
GA4-4
GA5-6
GB1-8
GB4-10
GB5-12

1-GA11
3-GC5
5-GG9
7-GG8
9-GG7
11-GG6

GE6-19
GE7-17
NC-15
NC-13
NC-11
GB2-RC-9
GA2-RC-7
GB3-RC-5
GB0-RC-3
GA0-RC-1

20-GC15
18-GC14
16-AREF
14-GND
12-GC9
10-GC8
8-GC10
6-GC7
4-GG4
2-GG5

GA1-GB3-RC-9 — see above
NC-15
NC-13
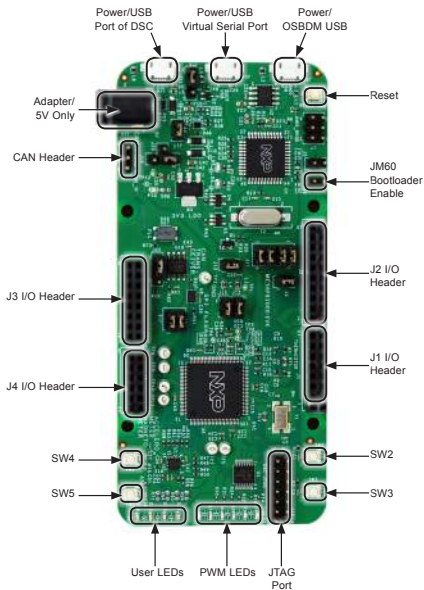NC-11
NC-9
NC-7
NC-5
GC6-3
NC-1

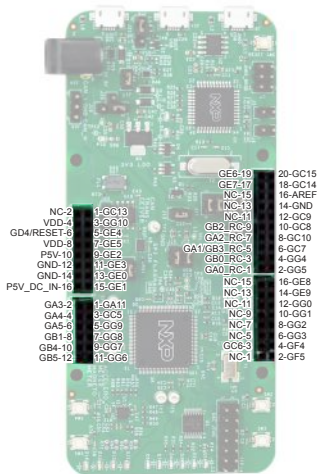16-GE8
14-GE9
12-GG0
10-GG1
8-GG2
6-GG3
4-GF4
2-GF5

**Figure 2:** MC56F83000-EVK Pin-Outs

## ATTENTIONS

1. MC56F83000-EVK can be powered by either of the three USB connectors (J8, J14, J21), or the adapter input (J24). Beware that only an adapter with 5V output can be used.

2. When the board is powered up, a green LED D14 will illuminate, indicating 3.3V is on. Notice that Boot ROM code is executed first out of reset, a time of about 3 seconds are consumed by ROM bootloader to check the active communication port (I$^2$C, CAN, SCI) before application code is executed.

3. J8 is the on-board OSBDM (realized by JM60) connecter which can be used to debug/program 56F83789.

4. J14 is the virtual serial port connector which can be used by ROM bootloader. CP210x USB to UART bridge VCP drivers are needed.

5. J21 is the USB connector of 56F83789 on chip USB module.

6. J6 is JM60 bootloader enable jumper for OSBDM update.

7. J10 is the JTAG connector for 56F83789. Remember to remove the four jumpers on J11 when this JTAG is used. This is to avoid the impact of on-board OSBDM circuit.

8. Explore more out-of-box demos and download software and tools at www.nxp.com/MC56F83000-EVK.

## SUPPORT

Visit **www.nxp.com/support** for a list of phone numbers within your region.

## WARRANTY

Visit **www.nxp.com/warranty** for complete warranty information.

## Get Started

Download installation software and documentation at **www.nxp.com/MC56F83000-EVK**.