



LCD Driver: PCF85176T/1Y

Part Number: 20-0702-LCDDR-3CH



General Description

The 0702-LCDDR is a 3 Channel LCD Driver / test system to drive three 7-segment TN-LCDs, the SDAF102NCRN01. Implementing a STM32L431KCU6 Processor to drive the NXP driver IC PCF85176T/1Y which communicates via the two-line bidirectional I2C-bus.

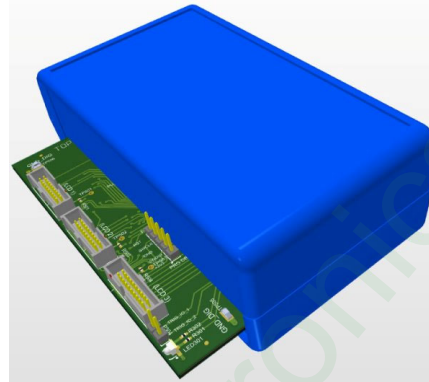
The SDAF102NCRN01 LCD is a Positive, Reflective 7-segment display, implemented as a 3-backplane multiplexed LCD. **(Sold separately).**

NOTE: The PCF85176T is configured as 4 backplane duplex driver. Firmware independently drives the 32 segments.

Each LCD has 7 segments per digit, (7x4 = 28), plus the 3x decimal points, plus the Colon so 28+4 = 32 LCD segments.

The system is powered by USB. PCB Voltage is jumper selectable to either +3V3 or +2V8.

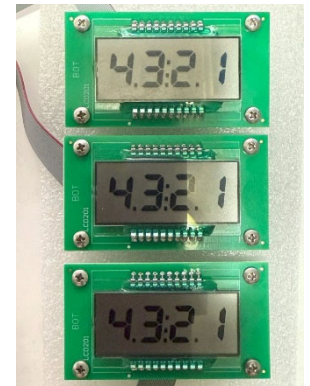
The 0702-LCDDR uses a Virtual Com Port (VCP) through the onboard USB connector to stream the LCD display data to the to a PC USB port. This requires the Windows CP210x VCP driver from Silicon Laboratories, Inc.



3-CH LCD Driver / tester



54-0702-B_LCDDRV



54-0303-A_LCD

LCDDR Function Highlights

7-Segment LCD Driver:	Drive x3 7-segment LCDs
On-board NXP driver IC:	PCF85176T/1Y
Programming connector:	Outside the Enclosure
Capture / Compare CH	Three (3)
External Pushbutton:	Used as interrupt toggle
USB Output	LCD display data sent via VCP UART
Baudrate	115200 baud
Silicon Laboratories, Inc. VCP Driver	CP210x VCP Windows

SHROUDED IDC HEADERS

P502	S0 – S11, BP0, BP1, BP2
P506	S12 – S23, BP0, BP1, BP2
P507	S24 – S35, BP0, BP1, BP2
PCB Headers Samtec	SHF-110-01-L-D-TH
Mates with: IDC Ribbon Cable Asy (Sold separately).	FFSD-10-D-08.00-01-N
USB2.0 Micro B (INCLUDED)	Use with USB cable: Type A 2.0 to Micro B 2.0