3.5 inch Display Module

Data Sheet

The 3.5 inch Display Module combines a powerful microcontroller with a touch-sensitive display. Thus, you can minimize the costs for your complete system. The board provides many connection types and can be widely programmed. With our cheap Breakout-Boards you can extend the display board with sensors, actuators and other needed connection interfaces. Explore the endless opportunities with our 2-in-1-display series.

General Features

Display Size:	3.5 inch
Display Resolution:	320 x 240 pixel
Touch Sensitivity:	Yes – capacitive touch
CPU:	STM32F429BIT6
SDRAM:	4Mx32bit
NOR Flash:	8Mx16bit
Input Voltage:	12V (± 20%)
Temperature Range:	-20°C to +70°C
Humidity Range:	Up to 90% at 60°C

Connectivity

- USB-Type-A Host
- USB-Type-B
- microSD-Card
- 2x Connector with CAN, I²C, SPI, PWM, ADC, GPIO
- Ethernet 10/100-RJ45 (only via Breakout-Board)

Interaction

- 3x LEDs for general usage
- 1x Reset button
- 1x Button for general usage
- Buzzer with min. pressure level 90dBA @ 2.73 kHz

Programming

The display board contains a STM32-microcontroller. This microcontroller can be programmed with several development environments by STMicroelectronics or third parties. STMicroelectronics also provides you with the APIs for your code. In our example packages we used System Workbench for STM32 by OpenSTM32 as IDE and the Standard Peripherals Library (SPL) as API. For flashing and debugging you need the ST-LINK/V2.

Display Specifications

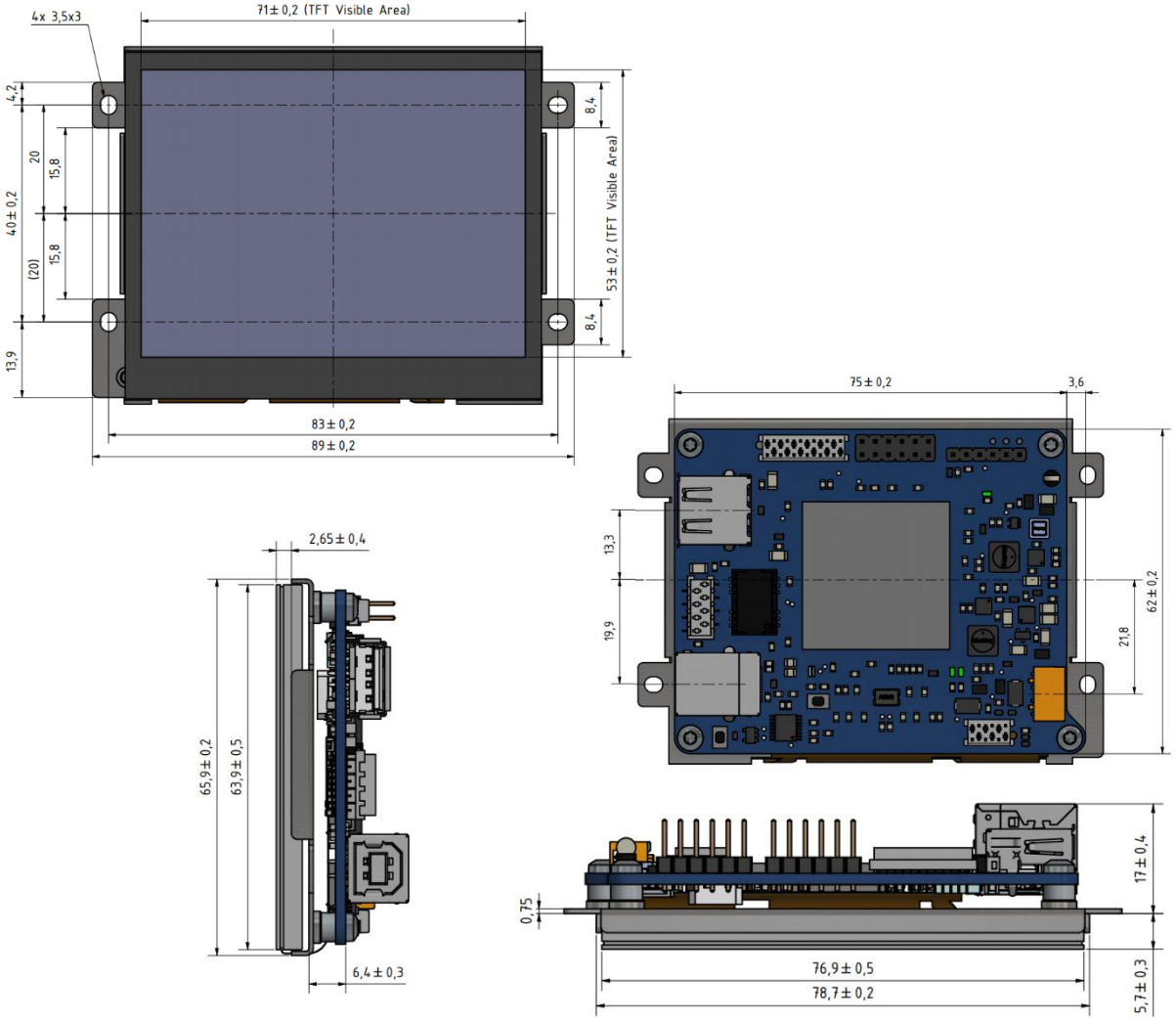
Active Area:	70.08 x 52.56 mm
Dot Pitch:	0.073 x 0.219 mm
LCD Type:	TFT, Normally White, Transmissive
Backlight Type:	LED, Normally White
Surface:	Glare
Brightness (Center of Display):	Typ. 340 cd/m² (min. 280 cd/m²)
Contrast Ratio:	Typ. 350 (min. 300)

Physical Dimensions

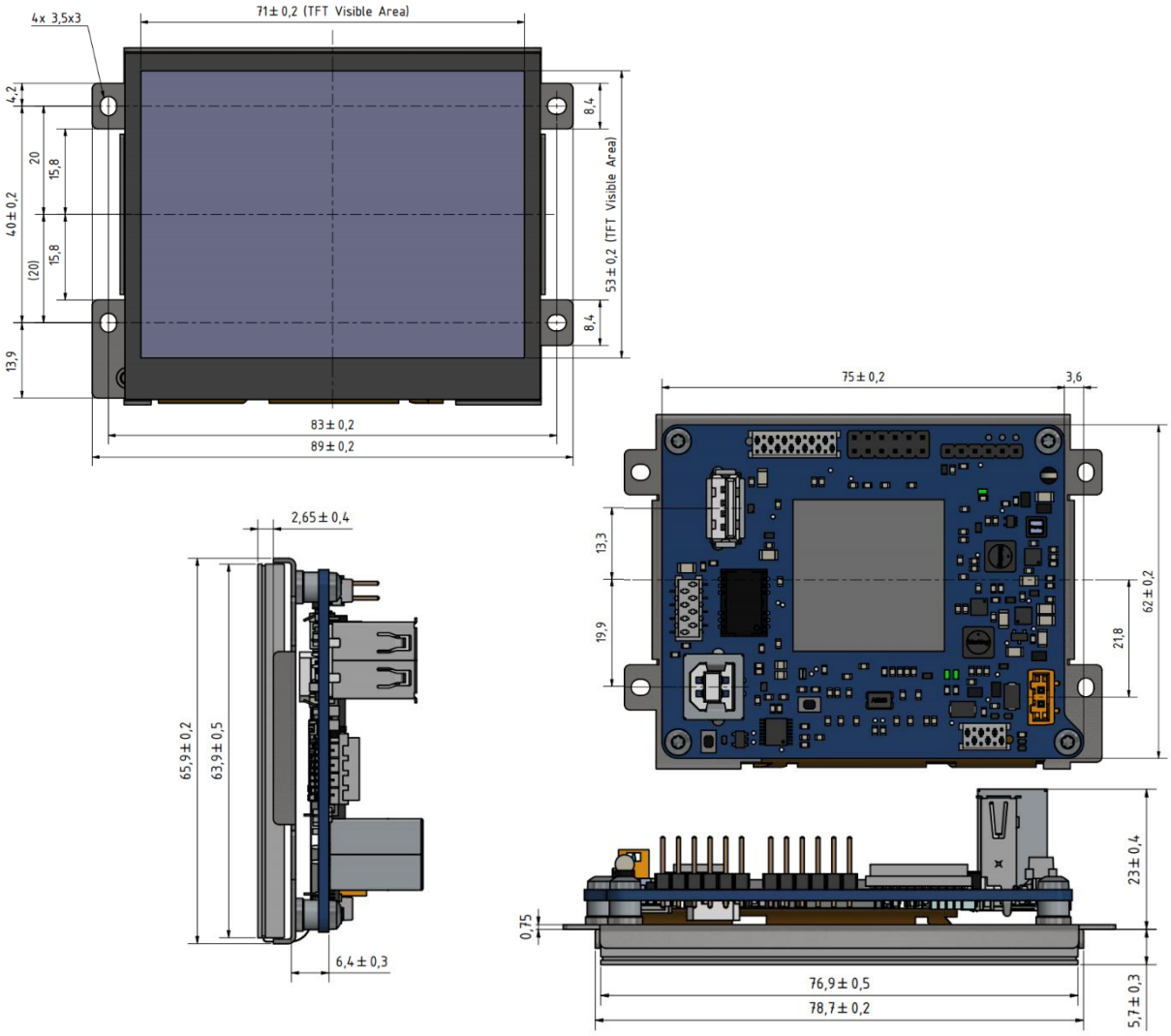
The display module is available in two configurations. One with both USB sockets standing orthogonal on the circuit board and one with them lying flat.

Horizontal Configuration

(All dimensions in mm)



Vertical Configuration
(All dimensions in mm)



Documents to Download

- Schematics
- Mechanical STEP Files
- Code Examples

Services

- Hardware Development to match your requirements
- Design to Cost through assembly options
- GUI Design and Firmware Development
- Training in Display Programming

Contact

EBS-SYSTART GmbH
Industriestraße 33a
82194 Gröbenzell
E-Mail: M.Bittner@ebs-systart.com
Homepage: www.ebs-systart.com