

Smart Touch Displays uniTFTs in a compact format

**ELECTRONIC
ASSEMBLY**
new display design

FEATURES

- 2.0" 320x240 / 2.8" 320x240 / 3.5" 480x320 / 4.3" 480x272
- AACs-Display (all angle color stability, optimized backlight and TFT-Panel over widest viewing angle)
- Superbright LED backlight over 800 cd/m²
- Object-oriented screen layout
- Change object during run-time: size, shape, color, content
- Animate and move objects
- Alpha-blending
- Fonts: ASCII and Unicode
- Single supply 3.3 V or directly through USB
- Serial Interfaces: USB, RS232, SPI, I²C
- 8 digital, freely definable I/Os built in, expandable up to 136
- 4 analog inputs
- Time (RTC), battery-buffered
- Flash-memory as storage for pictures, fonts, menus and log-files
- Internal functions for calculation as well as programmability
- Tone feedback build-in



GENERAL

EA uniTFTs are a high-quality all-in-one implementation of the display, microcontroller unit, and touch screen. It is all users need to directly control their application and expedite development, prototyping, and deployment of their HMI/GUI. Design the HMI/GUI using the easy-to-use drag-and-drop uniTFTdesigner graphics development software

The EA uniTFTs series provides sophisticated graphical functions and intuitive menu control with its built-in instruction set. Thanks to the integrated instruction set and the Windows design software uniTFTDesigner, not only electronics specialists, but also experts in the field of design and user guidance are able to create the entire HMI.

The display modules are immediately ready for operation with 3.3 V, controlled via the built-in serial interfaces RS232, SPI, I²C or USB. The modules can be operated directly through the USB, too. Object-oriented "programming", the wide set of commands, and the integrated but extensible Unicode fonts make "time-to-market" a breeze.

The EA uniTFT series, which forms the high-end market with larger modules, comes up with a very similar command set:

Currently are 3 different sizes available: 5" with 800x480 dots, 7" with 1024x600 dots and 10.1" with 1280x800 dots.

Advantage	Standard TFT	EA uniTFT(s)
Quality	Consumer	Non-consumer
Brightness	250cd	1000cd (typ.)
Viewing angle	Limited +/-50° (typ.)	Up to 340°
Color	TN with Gray inversion effect	IPS: no color shift
Touch	resistive	PCAP incl. controller
Interface	8-/16 Bit data bus	I ² C or SPI or USB
Availability	Minimum order quantity	Ex stock
Longevity	1 year or more	Minimum of 8 years
Support	None unless high quantity	Bundled with product purchase
ce / EMC	None	Tested and certified
Software	Place dot by dot to create character or touch buttons	- High level commands included - Graphics development software f.o.c.

Displays

ORDERING CODE

2.0" TFT 320 x 240 pixels, with PCAP and white LED backlight (external dimensions: 65 x 43 mm)	EA uniTFTs020-ATC
2.8" TFT 320 x 240 pixels, with PCAP and white LED backlight (external dimensions: 84 x 58 mm)	EA uniTFTs028-ATC
3.5" TFT 480 x 320 pixels, with PCAP and white LED backlight (external dimensions: 100 x 65 mm)	EA uniTFTs035-ATC
4.3" TFT 480 x 272 pixels, with PCAP and white LED backlight (external dimensions: 114 x 84 mm)	EA uniTFTs043-ATC

Accessories

Quick-Start Set incl. 2.8" IPS Display, PCAP and test board with RGB LED and analogue input	EA DEMOPACK-RGBANA
ZIF-connector 40 positions 0.5 mm pitch connector for FPC-cable	EA WF050-40S
FPC-cable 40 positions 0.5 mm pitch 102 mm long	EA KF050-40
USB-Kabel Typ A -> Mini USB around 1 m	EA KUSB-MINI