

Tablet-Like Touchscreens for the Raspberry Pi Compute Module 3+



Experienced developers know that the **Raspberry Pi's support** base is unrivaled and its GPU performance leads the industry. It makes sense to leverage this technology in industrial applications, and the PIQUE™ Tablet HMI is the perfect tool to accomplish that.

The Raspberry Pi is a great tool for creating prototypes. Pique quickly converts Raspberry Pi prototypes into production-ready solutions with a rich, snappy, colorful user experience. Thin and compact, PIQUE is easy to integrate with existing or new enclosure cabinets. A wide variety of power input options further eases system integration.

The PIQUE starter kit includes everything you need to get up and running immediately, including a preloaded Compute Module 3+ with a customized Raspbian™ Linux build, prebuilt Qt open source cross-platform development environment.

PIQUE is available now and additional options are coming soon. Contact The Circuit Foundry to order.



For use with Raspberry Pi™
Compute Module 3 and 3+

Benefits:

- convert prototypes to production instantly
- extensive driver/OS support
- industrial operating range
- flexible power supply options
- CM3+ available until at least 2026

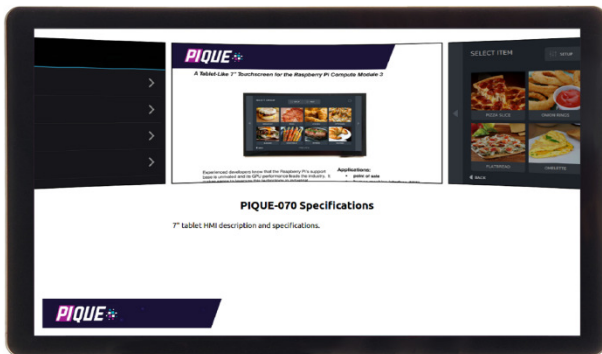
Development Support:

- custom Raspbian Linux with LCD and touch drivers
- precompiled Qt cross-compile system
- startup/boot splash screen system
- available CAD models

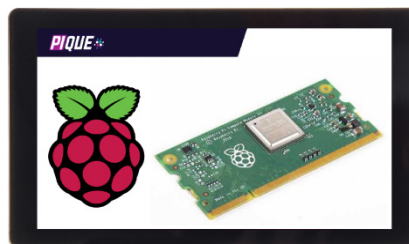
Additional Support:

- custom software development
- kernel/driver customization
- PCB additions, depopulation
- custom LCD/touch selection
- custom glass overlay
- mechanical integration

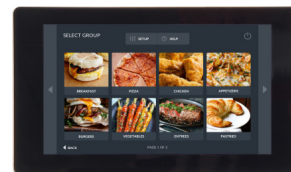
Tablet-Like Touchscreens for the Raspberry Pi Compute Module 3+



PQ-156 15.6" Touchscreen



PQ-101 10.1" Touchscreen



PQ-070 7" Touchscreen

Digital Interfaces

USB	USB A 2.0 receptacles / 0.1" headers
I/O signals	20 available Pi GPIO pins with 0.1" headers
available peripherals	UART w/handshaking, SPI, I ² C, PWM
backlight brightness	driven by CM3 PWM or external circuit

Compute Module Support

supported modules	CM3/CM3L, CM3+/CM3L+ with micro SD
boot devices	CM3 EMMC, micro SD, USB memory stick

TFT LCD Display

display sizes (diagonal)	7.0", 10.1", 15.6"
available display resolutions	800×480, 1280×800, 1920×1080 pixels
brightness	adjustable via software from <1% to 100%

Touchscreen

technology	projected capacitance
touch inputs	5 simultaneous touches
design	oversized black décor glass

Electrical Specifications

input voltage	regulated 5 VDC +/- 5% (optional for PQ-070) unregulated 9-36 VDC
current consumption	5-10W
operating temperature	-20°C to +70°C

Included Software

Linux	Raspbian Stretch image with display and touchscreen drivers
Qt	precompiled Qt Open Source and Windows cross-compilation suite
other frameworks	Electron, Node.js, and others in development
other support	startup screen installer for customized splash screens on power up

For technical resources, see: <http://thecircuitfoundry.com/products/pique/support/index.html>