Medallion Touch Screen Computer Module (TSCM)

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The best value in 32#bit computer modules!

1 Why the Touch Screen Computer Module: TSCM?

With our popular and proven Medallion Classic CPU modules, why would Techsol go to the effort of developing yet another computer module format? Many factors went into this decision, but the largest factor was cost.

Since our first touch-screen product design back in 2004, the number of LCD-oriented products has grown each year, to the point where it's very rare to see a request for a product without a display. And as the focus moved from the peripherals to the user interface, the target requirements shifted as well.

So, we set out to develop a new form factor specifically for the rapid development of low-cost products that are centred around an LCD with touch screen. We looked at features, expansion, components, production, everything in the goal to supply what's needed at the best cost.

2 What is a TSCM?

The TSCM is not just a computer module: it's a whole new way of building products. It's a "system"!

There are 3 or 4 layers to your product, which are (from front to back):

- LCD itself
- Display Interface board, with LCD connector, touch connector, power supplies, LED backlight supply, etc.
- TSCM :: the brains of the operation
- optionally, an I/O board with "outside" interface connectors and drivers, plus the power supply

For the 3#layer (2#board) option, we put a USB Type B connector and a 3 V supply on the Display Interface Board, and let you connect (and power) the computer from a USB connection. This would be most useful for simple information displays connected to other computers, such as advertising at a checkout, kiosk applications, etc.

3 How do I design with the TSCM?

The TSCM is the world's first low-cost, high-performance, modular touch-screen computer system based on the highest quality components and built in North America! You design your own custom computer in 3 simple steps:

- pick your display (it includes a matching Display Interface Board supporting the LCD, touch panel, adjustable backlight power, plus some optional extras)
- pick your computer power, from 500 to 1000 MIPS, with or without on-board Ethernet
- pick your mix of I/O and power supply. From POE to a super-low-cost 2#board option powered by USB, there's a range of boards coming.
- And then when you receive them, just stack them together and turn on the power!

That's it.

Display options currently supported include 3.5# qVGA, 4.3#, 5# WVGA, 7# WVGA, 7# Hi#Brite, and 10.4# SVGA LVDS with more coming.

Using the latest i.MX processors from Freescale Semiconductor of Austin Texas, Techsol's engineers have applied ¼ century of experience designing low-power CMOS computer systems for commercial, industrial, medical, automotive, and defense applications to the long-standing challenge of "Why can't I have high-quality, high-performance, AND low-cost?". Plus, all TSCM products run Techsol's Medallion Linux, one of the oldest and most stable Linux distributions exclusively targeting ARM processors (for over 10 years).