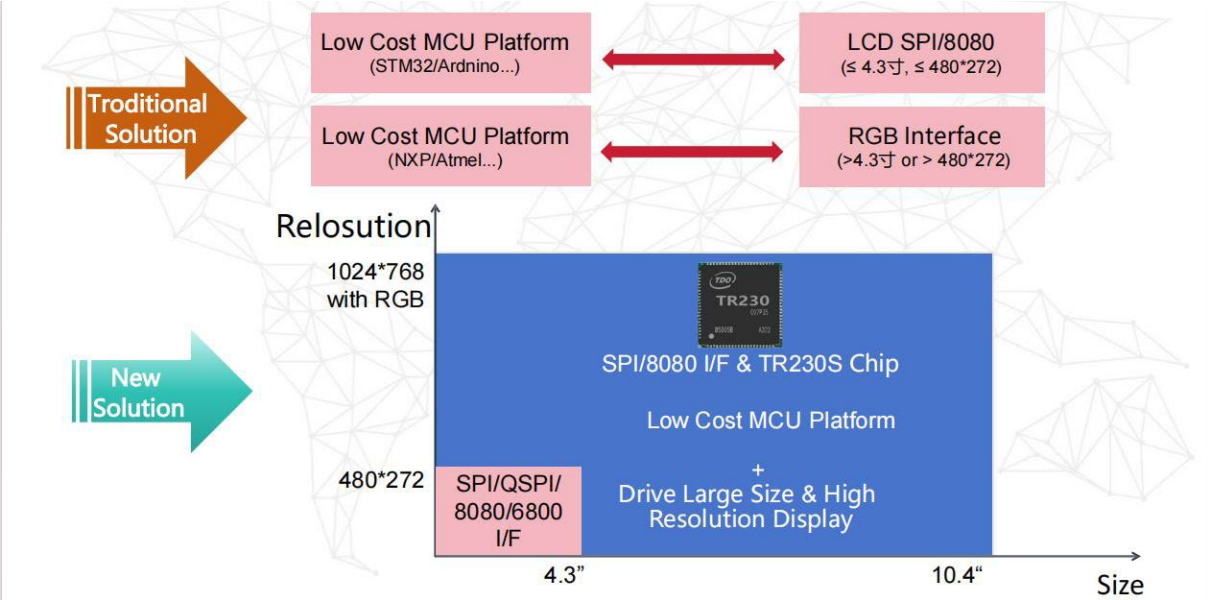
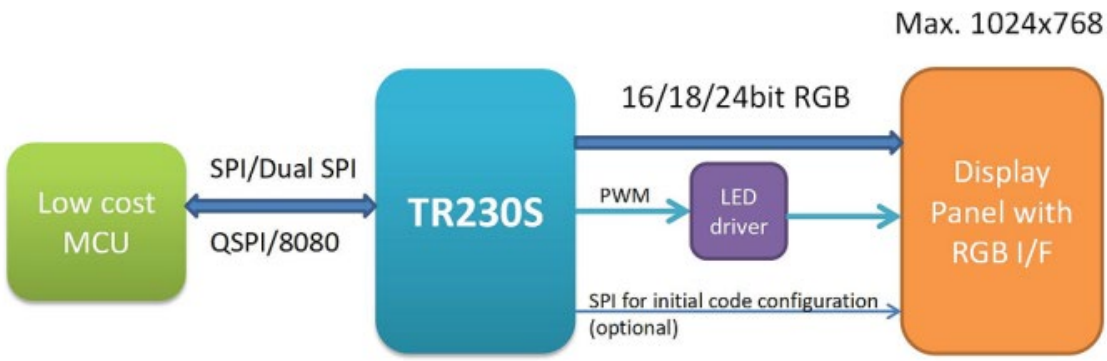
TR230S Interlink Display Solution, QSPI Drives Large Size and High Resolution Displays Easily

QSPI/SPI is a widely used communication interface and has high compatibility in the field of electronic devices. Many microcontrollers, processors and other electronic components support the QSPI/SPI interface, which enables intelligent display devices with large size modules driven by the QSPI/SPI to be conveniently integrated with other electronic components to build a complete intelligent display system.



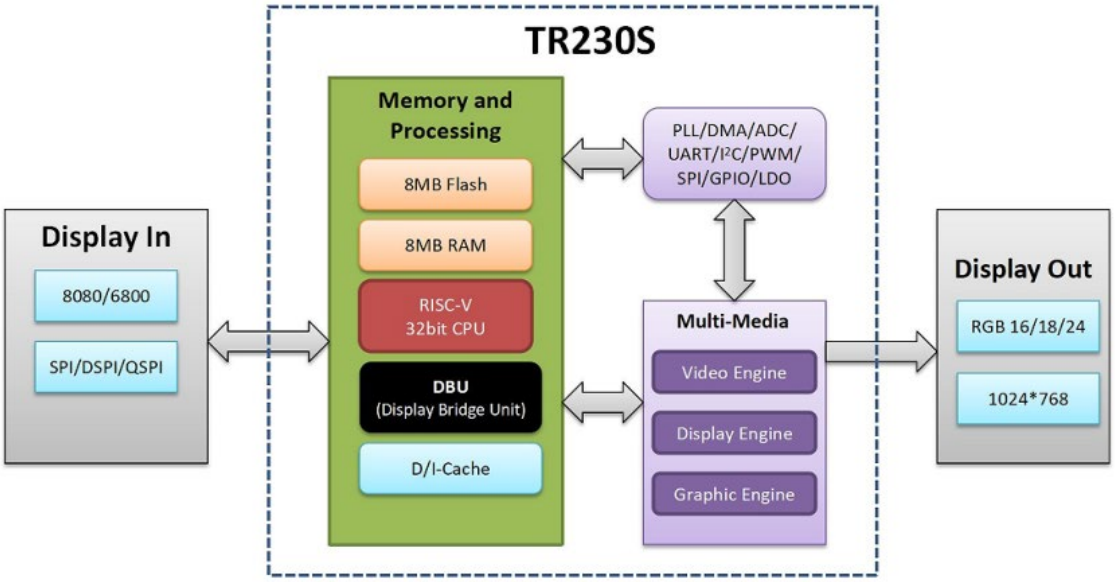
Comparison of Interlink Display Solutions



Concept Diagram of TR230S Interlink Display Solutions

TR230S Interlink Display Solution

The TR230S Interlink Display Solution carefully launched by TDO is based on the special chip TR230S. Compared with traditional low cost MCU platforms and high cost system platforms, it can realize the driving of large - size and high - resolution modules and deeply meets the development needs of users in many fields, solves the problem of interface mismatch on the client side and meets the requirements for QSPI/SPI/8080 interfaces.



Characteristics of the TR230S Chip

Characteristics of the TR230 Chip

• Conversion of 6800/8080 type CPU interface to parallel RGB interface

• Conversion of SPI/DSPI/QSPI interface to parallel RGB interface

• Hardware display rotation with 90°/180°/270°, mirroring and windowing

• Font integrated

• High efficient DBU(Display Bridge Unit) block

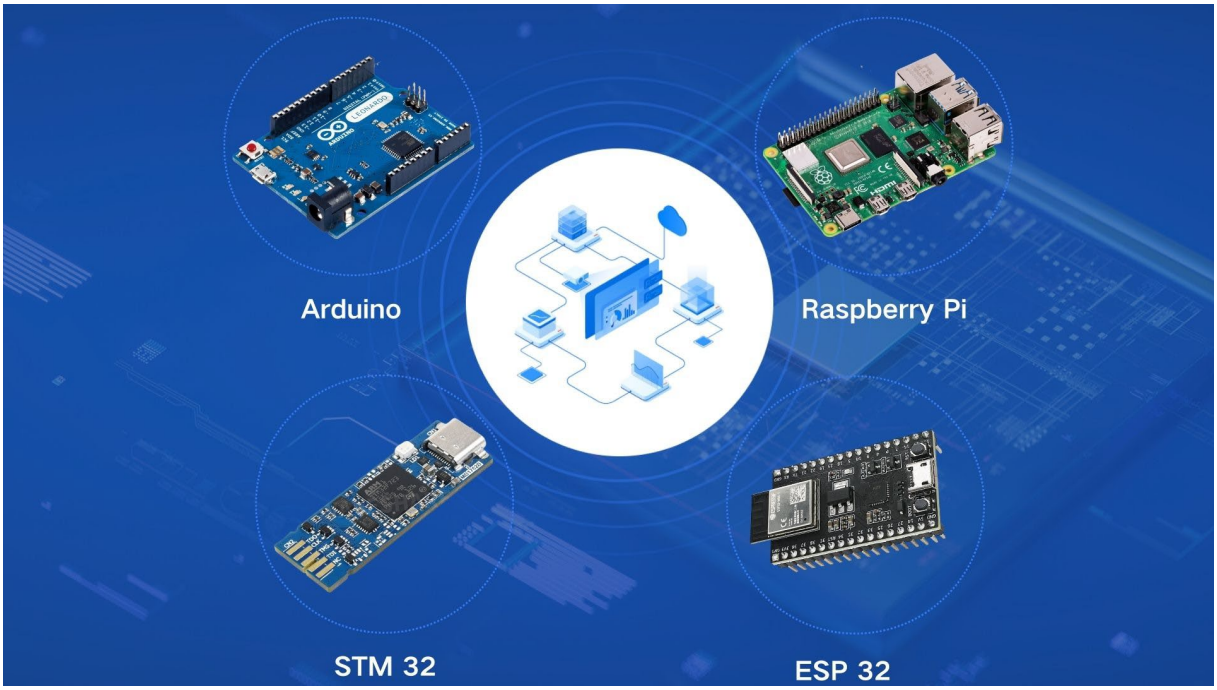
• 600MHz RISC-V core

• 8+8M Memory embedded

• 3.3VDC single power needed only

Advantages of TR230S Interlink Display Solution

Like a magic key to open the door of efficient connection, it adopts a convenient single - power input mode and is equipped with extremely complete reference drivers for mainstream MCU platforms, including Arduino, STM32, ESP32, Raspberry Pi, etc.

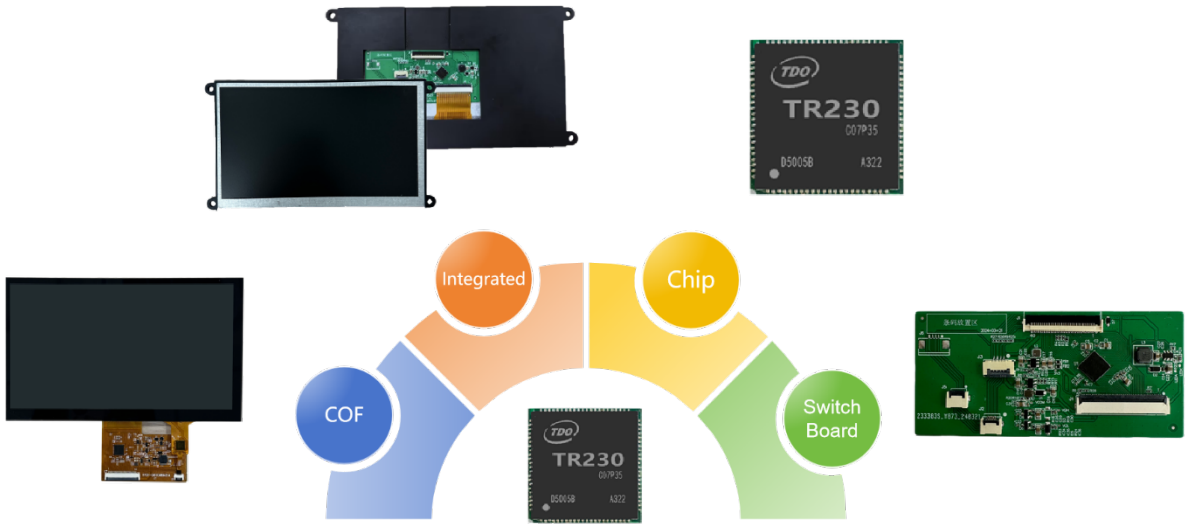


Compared with similar products, the TR230S supports more interfaces, the maximum resolution can reach 1024 * 768, and it has a display engine, a graphic engine, perfect memory configuration, and a small package volume.

Product Model	TDO TR230S
Interface	SPI/Dual SPI/QSPI/8080/6800
Max. Resolution	1024*768
SPI/8080 Clock（Max.）	100MHz（SPI）、50MHz（8080）
Display Engine	Support
Graphic Engine	Support
Chip Memory	8MB GRAM+8MB Nor flash
Embedded Memory	8MB
Color	16.7M
Integrate Fonts	Support
Package	QQFN68,7x7x0.85mm, pitch 0.35mm

Product Forms

Currently, we are launching four application forms with their own characteristics: The COF adapter solution shows flexibility and convenience, the integrated solution presents simplicity and efficiency, the chip solution highlights professionalism and precision, and the separated adapter small board solution gives more options.



Four Product Forms of TR230S

Such rich and diverse solutions allow users to easily select the structural solution that best suits their needs in different application scenarios and enjoy an excellent connection experience.