

EVE Chips Comparison

Device	FT800/1	FT810/1	FT812/3	BT815/6	BT817/8
Generation	1	2	2	3	4
Max. Standard Display resolution	WQVGA (470x272)	SVGA (800x600)	SVGA (800x600)	SVGA (800x600)	WXGA (1280x800)
RGB interface	18 bits (RGB666)	18 bits (RGB666)	18 bits (RGB666) 24 bits (RGB888)	18 bits (RGB666) 24 bits (RGB888)	18 bits (RGB666) 24 bits (RGB888)
Pinout compatibility		FT810 – FT800 FT811 – FT801	-	-	-
Touch function	800 – 4-wire Resistive 801-Capacitive *	810 – 4-wire Resistive 811-Capacitive *	812 – 4-wire Resistive 813-Capacitive *	816 – 4-wire Resistive 815-Capacitive *	818 – 4-wire Resistive 817-Capacitive *
Host interface	SPI/I2C	SPI/QSPI	SPI/QSPI	SPI/QSPI	SPI/QSPI
90° Screen Rotation	No	Yes	Yes	Yes	Yes
Object memory size	256KB	1MB	1MB	1MB	1MB
External memory support	No	No	No	up to 256GB, dedicated QSPI	up to 256GB, dedicated QSPI
Adaptive Framerate	No	No	No	Yes	Yes
Adaptive HSYNC	No	No	No	No	Yes
Dedicated PCLK PLL	No	No	No	No	Yes
2X Pixel Mode	No	No	No	No	Yes
Non Square Pixel	No	No	No	No	Yes
Co-Processor	32-bit RISC 48MHz	32-bit RISC 60MHz	32-bit RISC 60MHz	32-bit RISC 72MHz	32-bit RISC 72MHz
Image decoder	DXT1, JPG	DXT1, JPEG, PNG	DXT1, JPEG, PNG	DXT1, JPEG, PNG, ASTC	DXT1, JPEG, PNG, ASTC
HW acceleration	No	JPEG	JPEG	JPEG, ASTC	JPEG, ASTC
Video playback	No	Motion JPEG	Motion JPEG	Motion JPEG	Motion JPEG
GPIOs	3	3	5	5	5
Package	QFN48	QFN48	QFN56	QFN64	QFN64
Relative Price	100 %	130 %	138 %	148 %	161 %

* The integrated circuit does not include a capacitive touch controller.

It only receives events from the controller built into the display via I2C and sends them to the MCU via host interface.