



P3 Display



PowerTip Penny Pixel
Price & Performance & Powerful

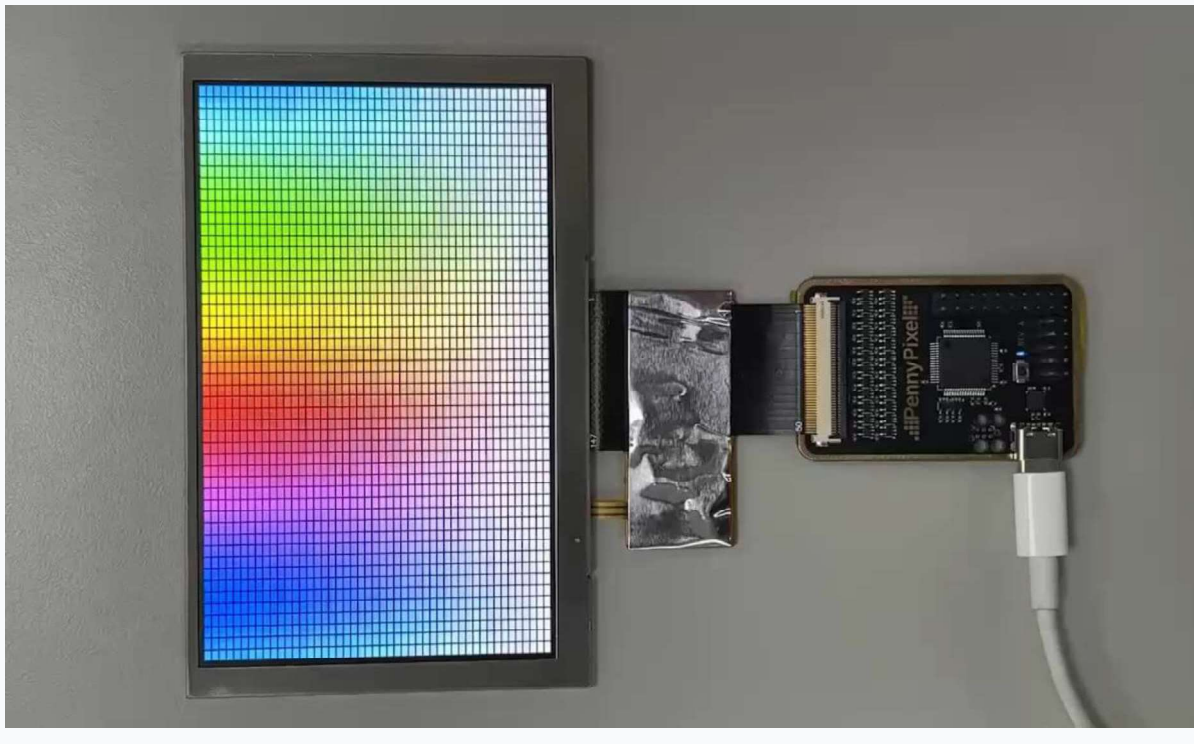


What if your MCU could drive the TFT directly without external RAM and Flash?



| P3 Display(Powertip Penny Pixel)

- Costly Display Controllers → MCU drives the display directly.
- Heavy Hardware Demands → NO external Framebuffer RAM, Flash memory
- Complex Architecture → Simplified the PCB layout and design.



Classical Approach vs. Penny Pixel

CRITERION	MONOCHROME	TFT	P3 Display
Optical performance	Low	Excellent	Good
Data Rates	Low	High	Low - Medium
PCB Layout	Very simple	Complex	Simple
Pins needed	Few	Many	Few
Microcontroller Complexity	Very simple	Complex	Simple
Microcontroller Cost	Low	High	Low
Ext. RAM needed	No	Yes, mostly	No
Supported Color Depth	Monochrome, ≤ 16 colors	~16.8 million colors	> 4,096 colors
Overall Display driving cost	low	high	low
Overall System complexity	low	high	low
Supported Resolutions	Low (≤320x240)	Very high	High

P3 Display: Empowering Your Devices

SMART HOME APPLIANCES

Fridges, dishwashers, vacuums

MONOCHROM REPLACEMENT

Driving color TFT at monochrome display costs.

BUILDING & INFRASTRUCTURE

Elevator indicators, floor displays, and smart HVAC access panels.

INDUSTRIAL & MOBILITY

Lab instruments, equipment status panels, and e-mobility dashboards.