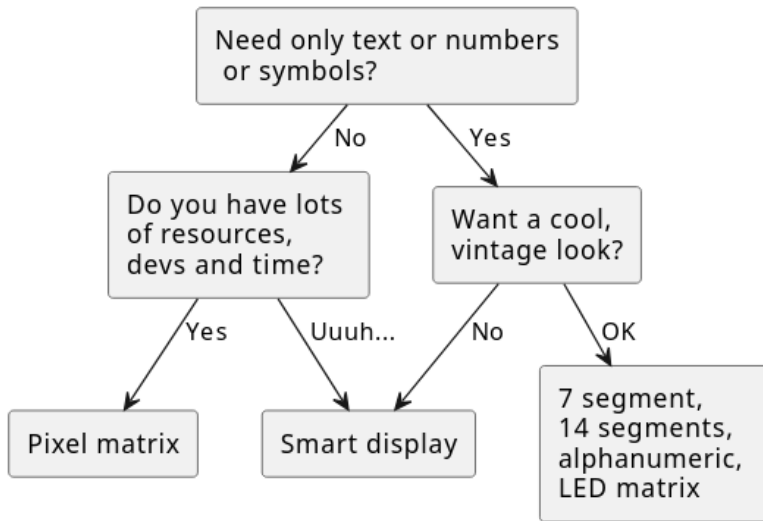
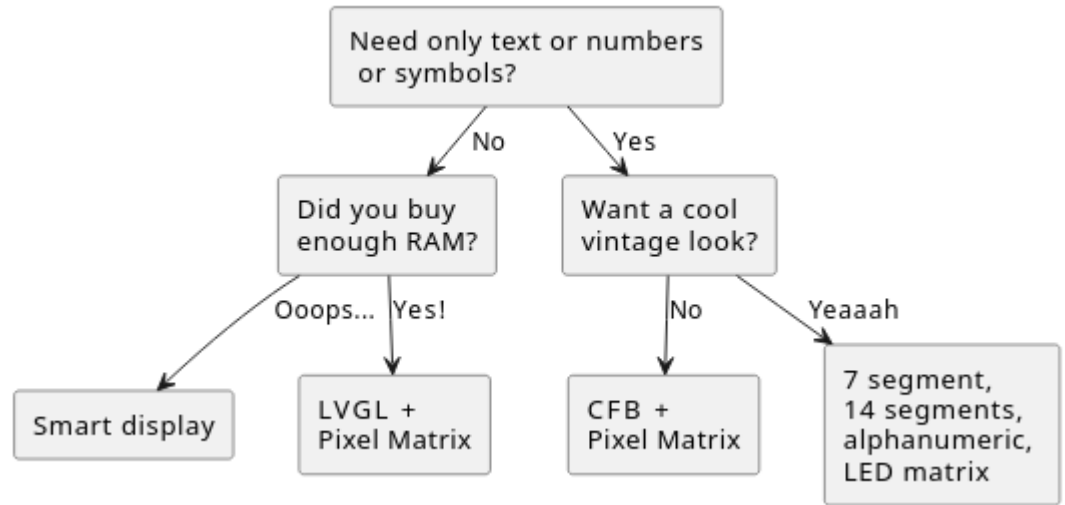


Which display should I choose?

Without Zephyr



With Zephyr



Display technologies cheat sheet

Catalogue name	Meaning	
LCD, TN, STN, FSTN HTN, DSTN, DFSTN, FRSTN, FFSTN, MSTN, EBTN...	Classic TN LCD	
TFT, IPS	TFT LCD (TN or IPS)	
EPD, ESL, E-Ink	E-Paper	
AMOLED	"Big" OLED	
PMOLED	"Small" OLED	
VFD	80's neon	

Zephyr-supported references cheat sheet 1/2

Auxdisplay API



 Hitachi
HD44780

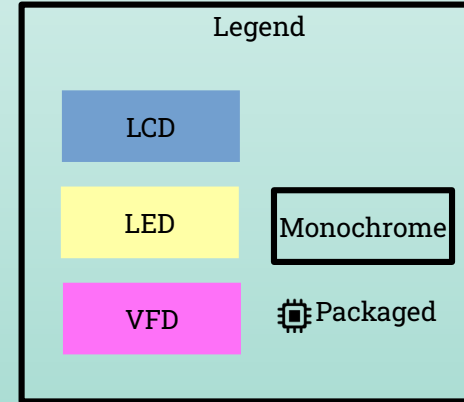
7-segments
GPIO

JHD
JHD1313

Sparkfun
Qwiic SerLCD

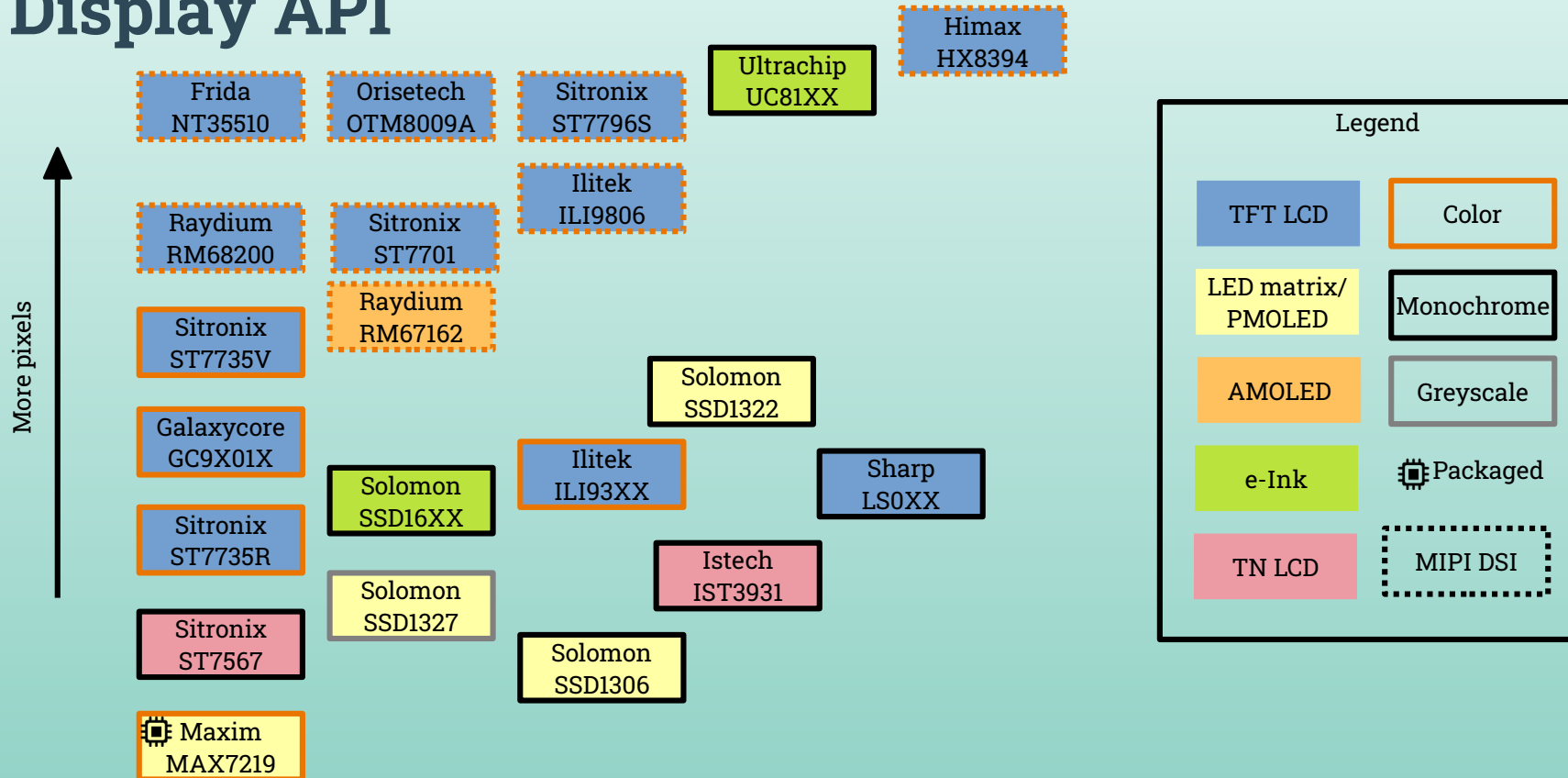
 PTC
PT6314

Noritake
Itron



Zephyr-supported references cheat sheet 2/2

Display API



Display interfaces pro & cons

Serial interfaces



I2C, SPI aka MIPI DBI type C

Ideal for most applications

Good Zephyr support

Use widespread I2C & SPI peripherals

Performances limits

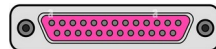
MIPI DSI®

Some MCU hardwares supported

Driver support for most $\geq 480 \times 800$ RGB controllers

Connector-friendly (differential)

Parallel interfaces



LCD RGB interface aka MIPI DPI

Some MCU hardwares supported

Big displays ($>240 \times 360$), high performances

Only for TFT LCD with compatible controller or driver

Harder to implement and debug

MCU interfaces, Intel 8080 and Motorola 6800 aka MIPI DBI type B and A

Some MCU hardwares supported

Few drivers supported