Class Diagram

Supra Dashboard (metaz-dev) — Layer & Recipes

meta-supra

conf

distro

supra.conf

layer.conf

recipes-image

core-image-supra

core-image-supra.bb

recipes-connectivity

wifi-config.bb

recipes-graphics

rdp-certs.bb

recipes-driver

gpio-driver.bb

recipes-backend

buttons-control.bb

servo-temp-control.bb

arduino-control.bb

gpio-driver-client.bb

recipes-services

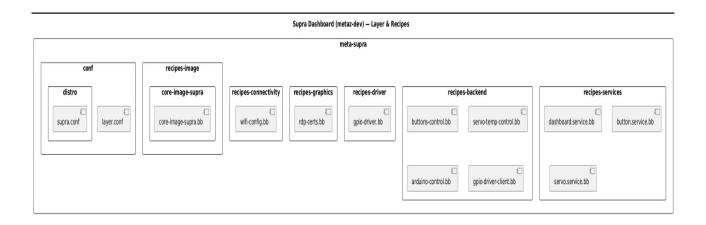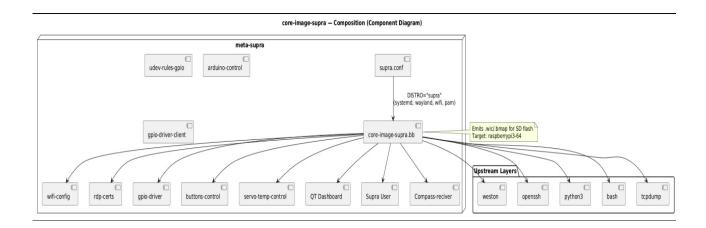dashboard.service.bb

button.service.bb

servo.service.bb

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meta-supra-commonapi (future)

capicxx-core-runtime.bb

capicxx-someip-runtime.bb

commonapi-tools.bb

hello-someip-client.bb

vsomeip.bb

hello-someip-service.bb

> Future SOME/IP layer. Not enabled by default.

Component Diagram

core-image-supra — Composition (Component Diagram)

meta-supra

- udev-rules-gpio
- arduino-control
- supra.conf

DISTRO="supra"
(systemd, wayland, wifi, pam)

- gpio-driver-client
- core-image-supra.bb

Emits .wic/.bmap for SD flash
Target: raspberrypi3-64

- wifi-config
- rdp-certs
- gpio-driver
- buttons-control
- servo-temp-control
- QT Dashboard
- Supra User
- Compass-reciver

Upstream Layers

- weston
- openssh
- python3
- bash
- tcpdump

Deployment Diagram

Build → Flash → Boot (Deployment View)

Dev

set BBLAYERS
DISTRO=\"supra\"
MACHINE=\"raspberrypi3-64\"

Yocto Build Host

BitBake Stack

poky

meta-raspberrypi

meta-openembedded

meta-supra

bitbake core-image-supra

core-image-supra-*.wic(.gz)

bmaptool copy

SD Card

Raspberry Pi 3B (64-bit)

Linux + systemd

Backends (systemd services)

Weston (Wayland)

Qt UI reads CSV via FileSeatReader
and reflects GPIO-driven states.

read/write pins

write (buttons/servo/arduino)

runs Qt dashboard (from qt-dev)

GPIO (sysfs)

/home/weston/data.csv

QtUI