

Host Operating System

Regular
Computer
("client")

All kind of clients

Platform-
IO SDK

Host programming language runtime

Web browsers

MDNS
client

Client libraries

lucisim

LUCIGUI

loads ↓ from

LUCIGUI

IP network
transparency

Websockets

Static Files

REST API

discovery
broadcast

USB
virtual COM port

JSONL TCP/IP service

Embedded Webserver

MDNS

lightweight IP TCP/IP stack

PIO Test
Suite

JSONL Protocol Registry

Runtime Plugins

Compile-time Plugins

Hybrid Controller Firmware

LUCIDAC Platform Library (based on Arduino/Teensyduino)

LUCIDAC
("server")

Devicetree entity hierarchy

FSMs (FlexIO, etc)

DAQ&Run Managment

Teensy Microcontroller
builtins

LUCIDAC Hardware Abstraction Layer

Digital Bus

SPI

Chips

etc