



Glossary



Glossary

Stable: 18.02.2020 - 09:30 / Revision: 18.02.2020 - 09:09

Jump to letter: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#) 0-9 See Also

Note: The glossary content is **automatically** used in all wiki pages.

1 A

A2DP

Advanced Audio Distribution Profile

ABI

Application binary interface. (In computer software, an application binary interface (ABI) describes the low-level interface between a computer program and the operating system or another program.)

ACL

Automatic current limit (LCD power improvement solution)

ADB

Android debug bridge (Android specific)

ADB

Android debug bridge daemon (Android specific)

ADC

Analog-to-digital converter. The process of converting a sampled analog signal to a digital code that represents the amplitude of the original signal sample.

AES

Advanced Encryption Standard

AF

GPIO alternate function

AHB

Advanced High-performance Bus

AI

Artificial Intelligence

AIDL

Android Interface Definition Language (see <https://developer.android.com/guide/components/aidl>)

aka

also known as

ALSA



Advanced Linux sound architecture

AOSP

Android Open Source Project

APB

Advanced Peripheral Bus

API

Application programming interface

Arm ®

<https://www.arm.com/> (see <https://www.arm.com/company/policies/trademarks/arm-trademark-list/cortex-trademark>)

ARP

Protocol used by the Internet Protocol, specifically IPv4, to map IP network addresses to the hardware addresses used by a data link protocol (https://en.wikipedia.org/wiki/Address_Resolution_Protocol)

ART

Android Runtime (see <https://source.android.com/devices/tech/dalvik>)

ASoC

ALSA System on Chip

AVB

Audio Video Bridging over Ethernet (set of IEEE standards for transporting audio and other real-time content over Ethernet)

AVD

Analog Voltage Detector

2 B

BCC

BPF compiler collection

BL1

Boot Loader stage 1

BL2

Boot Loader stage 2

BL32

Boot Loader stage 3-2

BL33

Boot Loader stage 3-3

BLE

Bluetooth Low Energy. Bluetooth LE, marketed as Bluetooth Smart is a wireless personal area network technology designed and marketed by the Bluetooth Special Interest Group aimed at novel applications in the healthcare, fitness, beacons, security, and home entertainment industries.

Compared to Classic Bluetooth, Bluetooth Smart is intended to provide considerably reduced power consumption and cost while maintaining a similar communication range. (sourcehttps://en.wikipedia.org/wiki/Bluetooth_Low_Energy)

BoardId

eval,disco (Generic term used, to complete configuration modules paths depending on used board)



BOR

Brownout reset

BSP

Board support package

BSEC

Boot and Security and OTP control

BT

BlueTooth

3 C

CABC

Content-Adaptative Backlight Control (LCD power improvement solution)

CAB

Content-Adaptative Backlight (LCD power improvement solution)

CAN

Controller Area Network (robust bus mainly used for automotive applications)

CEC

Consumer Electronics Control (HDMI standard)

CLUT

Colour Look-Up Table

CMSIS

Cortex Microcontroller Software Interface Standard

CNN

Convolutional Neural Network

configs

Configuration File System (See <https://en.wikipedia.org/wiki/Configfs> for more details)

Cortex ®

CPL

Common Public License

CPU

Central processing unit

CRC

Cyclic redundancy check calculation unit

CRYP

Cryptographic processor

CSG

Constructive Solid Geometry

CSI

Multi Speed Internal oscillator (STM32 clock source)

CSS

Cascading Style Sheets (web standard)

CTS



Compatibility Test Suite (Android specific) or Clear to send (in UART context)

CV

Computer Vision

4 D

DAC

Digital-to-analog converter (Electronic circuit that converts a binary number into a continuously varying value.)

DAI

Digital Audio Interface

DAPM

Dynamic Audio Power Management

DBI

Display Bus Interface (MIPI[®] Alliance standard)

DCMI

Digital Camera Memory Interface

DDB

Device Descriptor Block (MIPI[®] Alliance standard)

DDC

Display Data Channel (VESA standard)

DDR

Doubledata rate (memory domain)

debugfs

Debug File System (See <https://en.wikipedia.org/wiki/Debugfs> for more details)

devfs

Device File System (See https://en.wikipedia.org/wiki/Device_file#DEVFS for more details)

DES

Data Encryption Standard

DFSDM

Digital Filter for Sigma-Delta Modulator

DFU

Device Firmware Upgrade

DISCO

Discovery kit

DMA

Direct Memory Access

DMA2D

Chrom-Art Accelerator™ controller (STM32 specific)

DMIC

Digital microphone

DPI



Display Pixel Interface (MIPI® Alliance standard)

DRD

Dual-Role Device (USB standard defines host and device roles. OTG controllers support both roles and can be called Dual-Role Devices controllers.)

DRI

Direct Rendering Infrastructure (Linux framework for allowing direct access to graphics hardware... find more information on official DRI web site <http://dri.freedesktop.org/wiki/FrontPage>)

DRM

Direct Rendering Manager (kernel module that gives direct hardware access to DRI clients, find more information on official DRI web site <http://dri.freedesktop.org/wiki/DRM>)

DRP

Dual Role Port, an USB port that can operate in host or device mode

DSI

Display Serial Interface (MIPI® Alliance standard)

DT

Device Tree

DTB

Device Tree Binary (or Blob)

DTS

Device Tree Source (in software context) or Digital Temperature Sensor (in peripheral context)

DVI

Digital Visual Interface (Digital Display Working Group)

5 E

EAL

Evaluation Assurance Level

ECC

Error Correction Capability

ECC

Elliptic curve cryptography

ECDSA

Elliptic Curve Digital Signature Algorithm

EDID

Extended Display Identification Data (HDMI standard)

EDP

Embedded Display Port (VESA standard). See <http://www.displayport.org/> for more details

EEPROM

Electrically-erasable programmable read-only memory

EGL

Khronos Native Platform Graphics Interface (See <http://www.khronos.org/egl/> for more details)

EHCI



Enhanced Host Controller Interface

EMI

External memory interface

eMMC

former spelling for e•MMC ('e' in italic)

e•MMC

Embedded Multi-Media Card

EOT

End Of Transmission (MIPI® Alliance DSI standard)

eSDK

Extensible Software development kit

ETH

Ethernet

ETM

Embedded Trace Macrocell

ETZPC

Extended TrustZone Protection Controller

EVAL

Evaluation board

EXTI

External Interrupt

6 F

FB

Frame Buffer (could be the Kernel framebuffer linked to the display, a GPU framebuffer, an imaging framebuffer...)

FHS

File Hierarchy Standard defines by Linux Fundation

Flash

Flash memory shortened to gain space in titles, tables and block diagrams

Flash memory

Flash memories combine high density and cost effectiveness of EPROMs with the electrical erasability of EEPROMs. For this reason, the Flash memory market is one of the most exciting areas of the semiconductor industry today and new applications requiring in system reprogramming, such as cellular telephones, automotive engine management systems, hard disk drives, PC BIOS software for Plug & Play, digital TV, set top boxes, fax and other modems, PC cards and multimedia CD-ROMs, offer the prospect of very high volume demand.

foo_driver

foo_driver could be any driver that needs to control a GPIO

FPS

Frames per second

FSBL



First Stage Boot Loader

FTR

First Time Right

7 G

GDB

GNU debugger, a portable debugger that runs on many Unix-like systems

GIC

Generic Interrupt Controller

GP

Geometry Processor, used to execute Vertex Shaders (3D IP/IC specific).

GPIO

General-Purpose Input/Output (A realization of open ended transmission between devices on an embedded level. These pins available on a processor can be programmed to be used to either accept input or provide output to external devices depending on user desires and applications requirements.)

GPGPU

General-Purpose computation on Graphics Processing Units

GPT

GUID Partition Table

GPU

Graphics Processing Units

GRALLOC

GRaphic ALLOCation HAL or library (Android specific)

GUI

Graphical User Interface

8 H

HAL

Hardware Abstraction Layer

HDCP

High-Bandwidth Digital Content Protection (HDMI standard)

HDMI

High-Definition Multimedia Interface (HDMI standard)

HDP

Hardware Debug Port

HDR

High Dynamic Range (HDMI standard)

HID

Human Interface Device (for USB, Bluetooth...)



HIDL

HAL interface definition language (see <https://source.android.com/devices/architecture/hidl>)

HMAC

Hash-based Message Authentication Code

HPD

Hot Plug Detect

HS

High Speed (MIPI® Alliance DSI standard)

HSEM

Hardware Semaphore

HSE

High Speed External oscillator (STM32 clock source)

HSI

High Speed Internal oscillator (STM32 clock source) or High Speed Synchronous Serial Interface (MIPI® Alliance standard)

HSLV

High Speed Low Voltage pin mode

9 |

I2C

Inter-Integrated Circuit (Bi-directional 2-wire bus standard for efficient inter-IC control.)

I2S

Integrated Interchip Sound

I2S (without the 2 in superscript) refers to the STMicroelectronics integrated interchip sound IP.

I420

fourcc of YUV420 planar pixel format

IDE

(Software)Integrated development/design/debugging environment

IFP

Image Formatting Pipeline

IIC

Inter-Integrated Circuit (Bi-directional 2-wire bus standard for efficient inter-IC control.)

IIO

Industrial I/O Linux subsystem

initramfs

Initial ramdisk (https://en.wikipedia.org/wiki/Initial_ramdisk)

initrd

Initial ramdisk (https://en.wikipedia.org/wiki/Initial_ramdisk)

IMU

Inertial Measurement Unit

IO



input/output

IoT

Internet of Things

IPC

Inter-Processor Communication

IPCC

Inter-Processor Communication Controller

IPP

Image Preprocessor Pipeline

ITM

Instruction Trace Macrocell

IWDG

Independent Watchdog

10 J

JIT

Just-In-Time (Way of working for a given Virtual Machine)

JNI

Java Native Interface (for Android)

JTAG

debug and test protocol, named from the Joint Test Action Group that developed it

11 K

KMS

Kernel Mode Setting

12 L

LBA

Logical Block Addressing

LDISC

Line Discipline

LED

Light-emitting diode

LIN



Local Interconnect Network

LDO

Low-dropout regulator

LL

Low layer of STM32Cube

LP

Low Power (MIPI® Alliance DSI standard)

LTDC

LCD TFT Display Controller (STM32 specific)

LPTIM

low-power timer (STM32 specific)

LSE

Low Speed External oscillator (STM32 clock source)

LSI

Low Speed Internal oscillator (STM32 clock source)

13 M

MAC address

media access control address (https://en.wikipedia.org/wiki/MAC_address)

MCU

Microcontroller Unit (MCUs have internal flash memory and are intended to operate with a minimum amount of external support ICs. They commonly are a self-contained, system-on-chip (SoC) designs.)

MD5

Message Digest 5

MFD

Multifunction device

microSD™;

eg microSD card ('m' in lowercase whatever its position)

Micro-AB

Micro-AB connector/port ('M' in uppercase whatever its position)

Micro-USB

eg Micro-USB connector ('M' in uppercase whatever its position)

MIPI

Mobile Industry Processor Interface, open membership organization that includes leading companies in the mobile industry that share the objective of defining and promoting open specifications for interfaces inside mobile terminals, see MIPI® Alliance standard web site <https://www.mipi.org>

MMC

MultimediaCard

MMU

Memory Management Unit. (A hardware device or circuit that supports virtual memory and paging by translating virtual addresses into physical addresses.)



MPU

Microprocessor Unit

MTD

Memory Technology Device

14 N

NA

Non Applicable

NDA

Non-disclosure agreement

NFS

Network File System (https://en.wikipedia.org/wiki/Network_File_System)

NN

Neural Network

NV12

fourcc of YUV420 semi-planar pixel format

NVIC

Nested Vectored Interrupt Controller

NVM

Non Volatile Memory, like a flash memory

15 O

OGL

Open Graphics Library (See <http://www.opengl.org/> for more details)

OHCI

Open Host Controller Interface

ONFI

Open NAND Flash interface (The ONFI working group, acronym for Open NAND Flash Interface, was founded in 2005. The group's mission consists in creating a common industry standard for NAND Flash interfaces, to simplify integration of NAND Flash memory into consumer electronics (CE) devices and computing platforms. ST is one of the co-founder companies together with Hynix, Intel, Micron, Phison and Sony.)

OOM

Out Of Memory

OpenCL

Open Computing Language (See <http://www.opencl.org/> for more details)

OpenGL

Open Graphics Library (See <http://www.opengl.org/> for more details)

OpenGLES



Open Graphics Library for Embedded System (See <http://www.khronos.org/opengles/> for more details)

OpenVG

Open Vector Graphics (See <http://www.khronos.org/opencvg/> for more details)

OPP

Operating Performance Point (link to voltage and frequency scalings)

OP-TEE

Open Portable Trusted Execution Environment

OS

Operating System

OSS

Open Source Software

OST

Open System Trace

OTG

USB On-The-Go (Capability/type of USB port, acting primarily as USB device, to also act as USB host. Also known as USB OTG.)

OTP

One Time Programmed

16 P

PCB

Printed Circuit Board

PEM

Privacy Enhanced Mail (File format for storing and sending cryptographic keys, certificates, and other data)

PLB

Polygon List Builder (3D IP/IC specific)

PMIC

Power Management Integrated Circuit

PMU

Power Management Unit (in STPMIC context) or Performance Monitoring Unit (in Arm Cortex-A context)

POSIX

Portable Operating System Interface based on uniX (https://en.wikipedia.org/wiki/POSIX_terminal_interface for more details)

POT

Power Of Two (could be linked to Graphics, like in OpenGL textures)

PP

Pixel Processor, used to execute Fragment Shaders (3D IP/IC specific)

procfs

Process File System (See <https://en.wikipedia.org/wiki/Procfs> for more details)

PSCI

Power State Coordination Interface



PVD

Programmable Voltage Detector

PWM

Pulse Width Modulation

17 Q

18 R

RAM

Random Access Memory (Early computer memories generally had serial access. Memories where any given address can be accessed when desired were then called "random access" to distinguish them from the memories where contents can only be accessed in a fixed order. The term is used today for volatile random-access semiconductor memories.)

RCC

Reset and Clock Control

REGMAP

Register map (Linux registers map abstraction API)

RMA

Return Materials Authorization

RNG

Random Number Generator

ro

Read Only

ROM

Read Only Memory

RPMsg

Remote Processor Messaging

RTC

Real Time Clock

RTOS

Real Time Operating System

RX

Receive

19 S

SAI



Serial Audio Interface (Mechanism used to transfer non-buffered audio data between processors and/or audio converters.)

SCL

Serial clock line

SD

Secure digital

SDA

Serial DATA line

SD card

SD memory card (<https://www.sdcard.org>)

SDIO

Secure digital input/output

SDIO card

SDIO is an SD-size card with extended input/output functions

SDK

Software development kit (A programming package that enables a programmer to develop applications for a specific platform.)

Serdev

Serial device bus

SFR

Special Function Registers

SFI

Software Generated Interrupt

SHA

Secure Hash Algorithm

SiP

Silicon Provider

SLC

Single-Level Cell is a kind of NAND flash

SMC

Secure Monitor Call

SMBus

System Management Bus

SMP

symetric multiprocessing

SOM

System-On-Module

SOT

Start Of Transmission (MIPI® Alliance DSI standard)

S/PDIF

Sony/Philips Digital Interface Format (Protocol (IEC-60958))

SP_min

Secure Payload minimal

SPI

Serial Peripheral Interface



SPL

Secondary Program Loader, *Also known as **U-Boot SPL***

SSBL

Second Stage Boot Loader

STGEN

System Time Generator

ST-Link

spelling for older versions of STLink

STLink

ST in-circuit debugger and programmer for the STM8 and STM32 microcontroller families (See [ST-LINK](#) for more details)

STM

System Trace Module

STM32Series

stm32mp1

STP

System Trace Protocol (MIPI[®] Alliance standard specifying the protocol to carry above system traces)

SSP

Secure Secret Provisioning

SYSCFG

System Configuration

sysfs

System File System (See <https://en.wikipedia.org/wiki/Sysfs> for more details)

SYSTICK

System Tick

SWD

Serial Wire Debug

SWIM

Single Wire Interface Module (debug protocol for STM8 microcontrollers)

20 T

TA

Trusted Application

TAF

Trusted Application Function

TAMP

Tamper

TBG

Test Byte Generator, part of DSI, used to generate - on CPU demand - a stream of byte to the DSI D-PHY. The goal is to perform basic DSI D-PHY lane check

TCG

Trusted Computing Group



TCM

Tightly Coupled Memory

TDES

Triple Data Encryption Standard

TEE

Trusted Execution Environment

termios

terminal input output structure

TF-A

Trusted Firmware for Arm Cortex-A

TFTP

Trivial File Transfer Protocol (https://en.wikipedia.org/wiki/Trivial_File_Transfer_Protocol)

TPM

Trusted Platform Module

TrEQ

Transducer Equalizer

TSS

TPM Software Stack

TTY

TeleTYpewriter

TVG

Test Video Generator, part of DSI, used to generate a video stream automatically (for verification and validation task)

TX

Transmit

TZ

Trust Zone

TZC

TrustZone address space Controller for DDR

21 U

UART

Universal Asynchronous Receiver/Transmitter

UDC

USB Device Controller

UI

User Interface

UMS

User-space Mode Setting

µClinux

The letters "µC" are for "microcontroller", the name is pronounced "you-see-Linux" (<http://www.uclinux.org/>)



UP

uniprocessor

U-Boot

Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

USART

Universal Synchronous/Asynchronous Receiver/Transmitter

USBH

USB Host (STM32 specific)

USB Type-A

USB port or connector

USB Type-C

USB port or connector

UTMI

USB 2.0 Transceiver Macrocell Interface

USB On-The-Go

Capability/type of USB port, acting primarily as USB device, to also act as USB host. Also known as USB OTG.

UUID

universally unique identifier (https://en.wikipedia.org/wiki/Universally_unique_identifier)

UVC

USB Video Class

22 V

V4L2

Video 4 Linux version 2

VESA

Video Electronics Standards Association

VFS

Virtual File System

VREFBUF

voltage reference buffer (STM32 specific)

VTS

Vendor Test Suite (Android specific)

23 W

Wi-Fi

technology for wireless local area networking with devices based on the IEEE 802.11 standards



24 X

XIP

Execute In Place. Method of executing programs directly from long term storage rather than copying it into RAM (linked to NOR Flash).

XTI

Protocol specifying a way to define OST frame boundary and to support trace activation using uart channel.

25 Y

YAVTA

Yet Another V4L2 Test Application (V4L2 standard)

26 Z

27 0-9

28 See Also

Advanced Audio Distribution Profile

Application binary interface. (In computer software, an application binary interface (ABI) describes the low-level interface between a computer program and the operating system or another program.)

Automatic current limit (LCD power improvement solution)

Android debug bridge (Android specific)

Android debug bridge daemon (Android specific)

Analog-to-digital converter. The process of converting a sampled analog signal to a digital code that represents the amplitude of the original signal sample.

Advanced Encryption Standard

GPIO alternate function

General-Purpose Input/Output (A realization of open ended transmission between devices on an embedded level. These pins available on a processor can be programmed to be used to either accept input or provide output to external devices depending on user desires and applications requirements.)

Advanced High-performance Bus



Glossary

Artificial Intelligence

Android Interface Definition Language (see <https://developer.android.com/guide/components/aidl>)

also known as

Advanced Linux sound architecture

Android Open Source Project

Advanced Peripheral Bus

Application programming interface

Protocol used by the Internet Protocol, specifically IPv4, to map IP network addresses to the hardware addresses used by a data link protocol (https://en.wikipedia.org/wiki/Address_Resolution_Protocol)

Android Runtime (see <https://source.android.com/devices/tech/dalvik>)

ALSA System on Chip

Audio Video Bridging over Ethernet (set of IEEE standards for transporting audio and other real-time content over Ethernet)

Analog Voltage Detector

BPF compiler collection

Boot Loader stage 1

Boot Loader stage 2

Boot Loader stage 3-2

Boot Loader stage 3-3

Bluetooth Low Energy. Bluetooth LE, marketed as Bluetooth Smart is a wireless personal area network technology designed and marketed by the Bluetooth Special Interest Group aimed at novel applications in the healthcare, fitness, beacons, security, and home entertainment industries.

eval,disco (Generic term used, to complete configuration modules paths depending on used board)

Brownout reset

Board support package

Boot and Security and OTP control

One Time Programmed

BlueTooth

Content-Adaptative Backlight Control (LCD power improvement solution)

Content-Adaptative Backlight (LCD power improvement solution)

Controller Area Network (robust bus mainly used for automotive applications)

Consumer Electronics Control (HDMI standard)

High-Definition Multimedia Interface (HDMI standard)

Colour Look-Up Table

Cortex Microcontroller Software Interface Standard

Convolutional Neural Network

Configuration File System (See <https://en.wikipedia.org/wiki/Configfs> for more details)

Common Public License



Glossary

Central processing unit

Cyclic redundancy check calculation unit

Cryptographic processor

Constructive Solid Geometry

Multi Speed Internal oscillator (STM32 clock source)

Cascading Style Sheets (web standard)

Compatibility Test Suite (Android specific) or Clear to send (in UART context)

Universal Asynchronous Receiver/Transmitter

Computer Vision

Digital-to-analog converter (Electronic circuit that converts a binary number into a continuously varying value.)

Digital Audio Interface

Dynamic Audio Power Management

Display Bus Interface (MIPI[®] Alliance standard)

Mobile Industry Processor Interface, open membership organization that includes leading companies in the mobile industry that share the objective of defining and promoting open specifications for interfaces inside mobile terminals, see MIPI[®] Alliance standard web site <https://www.mipi.org>

Digital Camera Memory Interface

Device Descriptor Block (MIPI[®] Alliance standard)

Display Data Channel (VESA standard)

Video Electronics Standards Association

Doubledata rate (memory domain)

Debug File System (See <https://en.wikipedia.org/wiki/Debugfs> for more details)

Device File System (See https://en.wikipedia.org/wiki/Device_file#DEVFS for more details)

Data Encryption Standard

Digital Filter for Sigma-Delta Modulator

Device Firmware Upgrade

Discovery kit

Direct Memory Access

Chrom-Art Accelerator™ controller (STM32 specific)

Digital microphone

Display Pixel Interface (MIPI[®] Alliance standard)

Dual-Role Device (USB standard defines host and device roles. OTG controllers support both roles and can be called Dual-Role Devices controllers.)

USB On-The-Go (Capability/type of USB port, acting primarily as USB device, to also act as USB host. Also known as USB OTG.)

Direct Rendering Infrastructure (Linux framework for allowing direct access to graphics hardware... find more information on official DRI web site <http://dri.freedesktop.org/wiki/FrontPage>)



Glossary

Direct Rendering Manager (kernel module that gives direct hardware access to DRI clients, find more information on official DRI web site <http://dri.freedesktop.org/wiki/DRM>)

Dual Role Port, an USB port that can operate in host or device mode

Display Serial Interface (MIPI[®] Alliance standard)

Device Tree

Device Tree Binary (or Blob)

Device Tree Source (in software context) or Digital Temperature Sensor (in peripheral context)

Digital Visual Interface (Digital Display Working Group)

Evaluation Assurance Level

Elliptic curve cryptography

Error Correction Capability

Elliptic Curve Digital Signature Algorithm

Extended Display Identification Data (HDMI standard)

Embedded Display Port (VESA standard). See <http://www.displayport.org/> for more details

Electrically-erasable programmable read-only memory

Khronos Native Platform Graphics Interface (See <http://www.khronos.org/egl/> for more details)

Enhanced Host Controller Interface

External memory interface

former spelling for eMMC ('e' in italic)

MultimediaCard

End Of Transmission (MIPI[®] Alliance DSI standard)

Extensible Software development kit

Ethernet

Embedded Trace Macrocell

Extended TrustZone Protection Controller

Evaluation board

External Interrupt

Frame Buffer (could be the Kernel framebuffer linked to the display, a GPU framebuffer, an imaging framebuffer...)

Graphics Processing Units

File Hierarchy Standard defines by Linux Foundation

Flash memory shortened to gain space in titles, tables and block diagrams

Flash memories combine high density and cost effectiveness of EPROMs with the electrical erasability of EEPROMs. For this reason, the Flash memory market is one of the most exciting areas of the semiconductor industry today and new applications requiring in system reprogramming, such as cellular telephones, automotive engine management systems, hard disk drives, PC BIOS software for Plug & Play, digital TV, set top boxes, fax and other modems, PC cards and multimedia CD-ROMs, offer the prospect of very high volume demand.

foo_driver could be any driver that needs to control a GPIO



Glossary

Frames per second

First Stage Boot Loader

First Time Right

GNU dedugger, a portable debugger that runs on many Unix-like systems

Generic Interrupt Controller

Geometry Processor, used to execute Vertex Shaders (3D IP/IC specific).

General-Purpose computation on Graphics Processing Units

GUID Partition Table

GRaphic ALLOCation HAL or library (Android specific)

Hardware Abstraction Layer

Graphical User Interface

High-Bandwidth Digital Content Protection (HDMI standard)

Hardware Debug Port

High Dynamic Range (HDMI standard)

Human Interface Device (for USB, Bluetooth...)

HAL interface definition language (see <https://source.android.com/devices/architecture/hidl>)

Hash-based Message Authentication Code

Hot Plug Detect

High Speed (MIPI[®] Alliance DSI standard)

Hardware Semaphore

High Speed External oscillator (STM32 clock source)

High Speed Internal oscillator (STM32 clock source) or High Speed Synchronous Serial Interface (MIPI[®] Alliance standard)

High Speed Low Voltage pin mode

Inter-Integrated Circuit (Bi-directional 2-wire bus standard for efficient inter-IC control.)

Integrated Interchip Sound

fourcc of YUV420 planar pixel format

(Software)Integrated development/design/debugging environment

Image Formatting Pipeline

Inter-Integrated Circuit (Bi-directional 2-wire bus standard for efficient inter-IC control.)

Industrial I/O Linux subsystem

Initial ramdisk (https://en.wikipedia.org/wiki/Initial_ramdisk)

Initial ramdisk (https://en.wikipedia.org/wiki/Initial_ramdisk)

Inertial Measurement Unit

input/output

Internet of Things

Inter-Processor Communication



Glossary

Inter-Processor Communication Controller

Image Preprocessor Pipeline

Instruction Trace Macrocell

Independent Watchdog

Just-In-Time (Way of working for a given Virtual Machine)

Java Native Interface (for Android)

debug and test protocol, named from the Joint Test Action Group that developed it

Kernel Mode Setting

Logical Block Addressing

Line Discipline

Light-emitting diode

Local Interconnect Network

Low-dropout regulator

Low layer of STM32Cube

Low Power (MIPI[®] Alliance DSI standard)

LCD TFT Display Controller (STM32 specific)

low-power timer (STM32 specific)

Low Speed External oscillator (STM32 clock source)

Low Speed Internal oscillator (STM32 clock source)

media access control address (https://en.wikipedia.org/wiki/MAC_address)

Microcontroller Unit (MCUs have internal flash memory and are intended to operate with a minimum amount of external support ICs. They commonly are a self-contained, system-on-chip (SoC) designs.)

Message Digest 5

Multifunction device

Micro-AB connector/port ('M' in uppercase whatever its position)

eg Micro-USB connector ('M' in uppercase whatever its position)

Memory Management Unit. (A hardware device or circuit that supports virtual memory and paging by translating virtual addresses into physical addresses.)

Microprocessor Unit

Memory Technology Device

Non Applicable

Non-disclosure agreement

Network File System (https://en.wikipedia.org/wiki/Network_File_System)

Neural Network

fourcc of YUV420 semi-planar pixel format

Nested Vectored Interrupt Controller



Glossary

Non Volatile Memory, like a flash memory

Open Graphics Library (See <http://www.opengl.org/> for more details)

Open Host Controller Interface

Open NAND Flash interface (The ONFI working group, acronym for Open NAND Flash Interface, was founded in 2005. The group's mission consists in creating a common industry standard for NAND Flash interfaces, to simplify integration of NAND Flash memory into consumer electronics (CE) devices and computing platforms. ST is one of the co-founder companies together with Hynix, Intel, Micron, Phison and Sony.)

Out Of Memory

Open Computing Language (See <http://www.opencl.org/> for more details)

Open Graphics Library (See <http://www.opengl.org/> for more details)

Open Graphics Library for Embedded System (See <http://www.khronos.org/opengles/> for more details)

Open Vector Graphics (See <http://www.khronos.org/opencv/> for more details)

Operating Performance Point (link to voltage and frequency scalings)

Open Portable Trusted Execution Environment

Operating System

Open Source Software

Open System Trace

Capability/type of USB port, acting primarily as USB device, to also act as USB host. Also known as USB OTG.

Printed Circuit Board

Privacy Enhanced Mail (File format for storing and sending cryptographic keys, certificates, and other data)

Polygon List Builder (3D IP/IC specific)

Power Management Integrated Circuit

Power Management Unit (in STPMIC context) or Performance Monitoring Unit (in Arm Cortex-A context)

Portable Operating System Interface based on uniX (https://en.wikipedia.org/wiki/POSIX_terminal_interface for more details)

Power Of Two (could be linked to Graphics, like in OpenGL textures)

Pixel Processor, used to execute Fragment Shaders (3D IP/IC specific)

Process File System (See <https://en.wikipedia.org/wiki/Procsfs> for more details)

Power State Coordination Interface

Programmable Voltage Detector

Pulse Width Modulation

Random Access Memory (Early computer memories generally had serial access. Memories where any given address can be accessed when desired were then called "random access" to distinguish them from the memories where contents can only be accessed in a fixed order. The term is used today for volatile random-access semiconductor memories.)

Reset and Clock Control

Register map (Linux registers map abstraction API)

Return Materials Authorization



Glossary

Random Number Generator

Read Only

Read Only Memory

Remote Processor Messaging

Real Time Clock

Real Time Operating System

Receive

Serial Audio Interface (Mechanism used to transfer non-buffered audio data between processors and/or audio converters.)

Serial clock line

Secure digital

Serial DAtA line

SD memory card (<https://www.sdcard.org>)

Secure digital input/output

SDIO is an SD-size card with extended input/output functions

Software development kit (A programming package that enables a programmer to develop applications for a specific platform.)

Serial device bus

Special Function Registers

Software Generated Interrupt

Secure Hash Algorithm

Silicon Provider

Single-Level Cell is a kind of NAND flash

Secure Monitor Call

System Management Bus

symetric multiprocessing

System-On-Module

Start Of Transmission (MIPI[®] Alliance DSI standard)

Sony/Philips Digital Interface Format (Protocol (IEC-60958))

Secure Payload minimal

Serial Peripheral Interface

Secondary Program Loader, *Also known as **U-Boot SPL***

Das U-Boot -- the Universal Boot Loader (see [U-Boot_overview](#))

Second Stage Boot Loader

System Time Generator

spelling for older versions of STLink

ST in-circuit debugger and programmer for the STM8 and STM32 microcontroller families (See [ST-LINK](#) for more details)



Glossary

System Trace Module

stm32mp1

System Trace Protocol (MIPI[®] Alliance standard specifying the protocol to carry above system traces)

Secure Secret Provisioning

System Configuration

System File System (See <https://en.wikipedia.org/wiki/Sysfs> for more details)

System Tick

Serial Wire Debug

Single Wire Interface Module (debug protocol for STM8 microcontrollers)

Trusted Application

Trusted Application Function

Tamper

Test Byte Generator, part of DSI, used to generate - on CPU demand - a stream of byte to the DSI D-PHY. The goal is to perform basic DSI D-PHY lane check

Trusted Computing Group

Tightly Coupled Memory

Triple Data Encryption Standard

Trusted Execution Environment

terminal input output structure

Trusted Firmware for Arm Cortex-A

Trivial File Transfer Protocol (https://en.wikipedia.org/wiki/Trivial_File_Transfer_Protocol)

Trusted Platform Module

Transducer Equalizer

TPM Software Stack

TeleTYpewriter

Test Video Generator, part of DSI, used to generate a video stream automatically (for verification and validation task)

Transmit

Trust Zone

TrustZone address space Controller for DDR

USB Device Controller

User Interface

User-space Mode Setting

The letters "C" are for "microcontroller", the name is pronounced "you-see-Linux" (<http://www.uclinux.org/>)

uniprocessor

Universal Synchronous/Asynchronous Receiver/Transmitter

USB Host (STM32 specific)



Glossary

USB port or connector

USB port or connector

USB 2.0 Transceiver Macrocell Interface

universally unique identifier (https://en.wikipedia.org/wiki/Universally_unique_identifier)

USB Video Class

Video 4 Linux version 2

Virtual File System

voltage reference buffer (STM32 specific)

Vendor Test Suite (Android specific)

technology for wireless local area networking with devices based on the IEEE 802.11 standards

Execute In Place. Method of executing programs directly from long term storage rather than copying it into RAM (linked to NOR Flash).

Protocol specifying a way to define OST frame boundary and to support trace activation using uart channel.

Yet Another V4L2 Test Application (V4L2 standard)