FLOSS - Free Libre & Open Source Software

Perception Software

GEN Series Software

Version v8.40.0

HBM

Contents

Introduction

Besides a high degree of own developed software code, HBM has been using Free, Libre and Open Source Software (FLOSS) to realize all functions of the GHS Data Acquisition System and the accompying Perception PC software. The system basically consists of a mainframe (housing, power supply and backplane) with installed front panel or communication processor and an assembly of various connection boards and amplifier boards based on the customer's requirement.

The following gives an overview about the FLOSS used and the relevant license model.

Even though the list has been produced for the current GHS firmware and Perception, the software components are unlikely to change in the future, based on the fact, that all FLOSS software components are related to GHS's core system architecture.

Perception Software Component

Table 1.1: Perception Software List

Packages	License Model
cJSON	MIT
NewtonSoft.Json	MIT
Ooura's algorithm	Artistic-2.0
Microsoft.Azure.KeyVault.Core	MIT
WindowsAzure.Storage	Apache-2.0
ListViewPrinterBase	ListViewPrinterBase License
Microsoft.Data.Edm	Microsoft Software License Terms
Microsoft.Data.OData	Microsoft Software License Terms
Microsoft.Data.Services.Client	Microsoft Software License Terms
System.ComponentModel.EventBasedAsync	Microsoft Software License Terms
System.Dynamic.Runtime	Microsoft Software License Terms
System.Net.Requests	Microsoft Software License Terms
System.Spatial	Microsoft Software License Terms
LZ4	BSD-2-Clause

GEN Series Firmware Component

Table 1.2: GEN Series Software List

Packages	License Model
alsa-lib	LGPL-2.1
alsa-ucm-conf	BSD-3-Clause

Packages	License Model
alsa-utils	GPL-2.0
attr	GPL-2.0
avahi-autoipd	LGPL-2.1
base-files	GPL-2.0
blkid	GPL-2.0
block-mount	GPL-2.0
blockd	GPL-2.0
boost	BSL-1.0
busybox	GPL-2.0
dbus	AFL-2.1
debugfs	GPL-2.0
dropbear	MIT
dumpe2fs	GPL-2.0
e2freefrag	GPL-2.0
e2fsprogs	GPL-2.0
f2fs-tools	GPL-2.0
f2fsck	GPL-2.0
fdisk	GPL-2.0
flashrom	GPL-2.0
fstools	GPL-2.0
fwtool	GPL-2.0
gdb	GPL-3.0
getrandom	GPL-2.0
ip-bridge	GPL-2.0
ip-full	GPL-2.0
jq	BSD
jshn	ISC
jsonfilter	ISC
kernel	GPL-2.0
asn1-decoder	GPL-2.0
ata-core	GPL-2.0
button-hotplug	GPL-2.0
cgosdrv	GPL-2.0
crypto-acompress	GPL-2.0
crypto-aead	GPL-2.0
crypto-arc4	GPL-2.0
crypto-cbc	GPL-2.0
crypto-ccm	GPL-2.0
crypto-cmac	GPL-2.0
crypto-crc32	GPL-2.0
crypto-crc32c	GPL-2.0
crypto-ctr	GPL-2.0
crypto-cts	GPL-2.0
crypto-des	GPL-2.0
crypto-ecb	GPL-2.0
crypto-gcm	GPL-2.0
crypto-gf128	GPL-2.0
crypto-ghash	GPL-2.0
crypto-hash	GPL-2.0
crypto-hmac	GPL-2.0
crypto-manager	GPL-2.0

Packages	License Model
crypto-md4	GPL-2.0
crypto-md5	GPL-2.0
crypto-null	GPL-2.0
crypto-rng	GPL-2.0
crypto-seqiv	GPL-2.0
crypto-sha1	GPL-2.0
crypto-sha256	GPL-2.0
crypto-sha512	GPL-2.0
dax	GPL-2.0
dm	GPL-2.0
fs-autofs4	GPL-2.0
fs-cifs	GPL-2.0
fs-cramfs	GPL-2.0
fs-exportfs	GPL-2.0
fs-ext4	GPL-2.0
fs-f2fs	GPL-2.0
fs-ksmbd	GPL-2.0
fs-nfs-common	GPL-2.0
fs-nfs-common-rpcsec	GPL-2.0
fs-nfsd	GPL-2.0
hbm-eth-core	GPL-2.0
hbm-fpga-core	GPL-2.0
hbm-gestalt-driver	GPL-2.0
hid	GPL-2.0
hwmon-core	GPL-2.0
i2c-algo-bit	GPL-2.0
i2c-core	GPL-2.0
igb	GPL-2.0
input-core	GPL-2.0
input-evdev	GPL-2.0
ipt-core	GPL-2.0
ipt-raw	GPL-2.0
ixgbe	GPL-2.0
keys-encrypted	GPL-2.0
keys-trusted	GPL-2.0
ktapi	GPL-2.0
ledtrig-audio	GPL-2.0
lib-crc-ccitt	GPL-2.0
lib-crc16	GPL-2.0
lib-crc32c	GPL-2.0
lib-lzo	GPL-2.0
lib-textsearch	GPL-2.0
lib-zlib-inflate	GPL-2.0
libphy	GPL-2.0
md-mod	GPL-2.0
md-raid0	GPL-2.0
md-raid1	GPL-2.0
md-raid10	GPL-2.0
mdio	GPL-2.0
mdio-devres	GPL-2.0
nf-conntrack	GPL-2.0

Packages	License Model
nf-ipt	GPL-2.0
nf-log	GPL-2.0
nf-nat	GPL-2.0
nf-nathelper-extra	GPL-2.0
nf-reject	GPL-2.0
nls-base	GPL-2.0
nls-cp437	GPL-2.0
nls-iso8859-1	GPL-2.0
nls-utf8	GPL-2.0
oid-registry	GPL-2.0
pcan	GPL-2.0
pcspkr	GPL-2.0
pexesc_uio	GPL-2.0
pps	GPL-2.0
ptp	GPL-2.0
random-core	GPL-2.0
regmap-core	GPL-2.0
scsi-core	GPL-2.0
scsi-generic	GPL-2.0
sound-core	GPL-2.0
sound-hda-core	GPL-2.0
sound-hda-intel	GPL-2.0
tpm	GPL-2.0
usb-core	GPL-2.0
ksmbd-avahi-service	GPL-2.0
ksmbd-server	GPL-2.0
ksmbd-utils	GPL-2.0
libattr	GPL-2.0
libavahi-client	LGPL-2.1
libavahi-dbus-support	LGPL-2.1
libc	GPL-3.0
libcap	GPL-2.0
libdbus	AFL-2.1
libedit	BSD-3-Clause
libexpat	MIT
libftdi1	LGPL-2.1
libgnutls	LGPL-2.1
libkmod	LGPL-2.1
libpci	GPL-2.0
libpcre	BSD-3-Clause
libpthread	GPL-3.0
librt	GPL-3.0
libselinux	libselinux-1.0
libsndfile	LGPL-2.1
libtasn1	LGPL-2.1
libthread-db	GPL-3.0
linuxptp	GPL-2.0
logd	GPL-2.0
lsblk	GPL-2.0
mkf2fs	GPL-2.0
mtd	GPL-2.0

Packages	License Model
musl-fts	LGPL-2.1
netifd	GPL-2.0
openwrt-keyring	GPL-2.0
opkg	GPL-2.0
partx-utils	GPL-2.0
pciids	GPL-2.0
pciutils	GPL-2.0
procd	GPL-2.0
procd-seccomp	GPL-2.0
procd-ujail	GPL-2.0
pv	Artistic-2.0
resize2fs	GPL-2.0
screen	GPL-3.0
terminfo	MIT
tune2fs	GPL-2.0
ubox	GPL-2.0
ubus	LGPL-2.1
ubusd	LGPL-2.1
uci	LGPL-2.1
uclient-fetch	ISC
urandom-seed	GPL-2.0
urngd	GPL-2.0
usign	ISC
zlib	Zlib

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