

GXL:BL1:9ac50e:a1974b;FEAT:ADFC31AC;POC:3;RCY:0;EMMC:800;NAND:81;SD:0;READ:0;0.0
;CHK:0;

no sdio debug board detected

TE: 222857

BL2 Built : 14:59:36, Aug 9 2017.

gxl ge8c6a83 - xiaobo.gu@droid12

set vcck to 1120 mv

set vddee to 1000 mv

Board ID = 2

CPU clk: 1200MHz

DQS-corr enabled

DDR scramble enabled

DDR3 chl: Rank0+1 @ 768MHz - FAIL

DDR3 chl: Rank0 @ 768MHz - FAIL

DDR3 chl: Rank0 16bit @ 768MHz - PASS

Rank0: 1024MB(auto)-2T-11

DataBus test pass!

AddrBus test pass!

Load fip header from SD, src: 0x0000c200, des: 0x01400000, size: 0x00004000

New fip structure!

Load bl30 from SD, src: 0x00010200, des: 0x01100000, size: 0x0000d600

Load bl31 from SD, src: 0x00020200, des: 0x05100000, size: 0x0002c600

Load bl33 from SD, src: 0x00050200, des: 0x01000000, size: 0x000a0c00

NOTICE: BL3-1: v1.0(release):801e730

NOTICE: BL3-1: Built : 22:09:38, Aug 10 2017

[BL31]: GXL CPU setup!

mpu_config_enable:ok

[Image: gxl_v1.1.3244-a3237e2 2017-08-16 14:01:18 hong.guo@droid04]

OPS=0xa2

cd 87 3d 41 d9 27 0 2d f1 b5 6d d2 [0.846366 Inits done]

secure task start!

high task start!

low task start!

ERROR: Error initializing runtime service opteed_fast

<debug_uart>

U-Boot 2025.07 (Aug 14 2025 - 04:14:03 +0000) khadas-vim

Model: Khadas VIM

SoC: Amlogic Meson GXL (S905W) Revision 21:b (a2:2)

DRAM: 2 GiB (total 1 GiB)

Core: 178 devices, 28 uclasses, devicetree: separate

MMC: mmc@70000: 0, mmc@72000: 1, mmc@74000: 2

Loading Environment from nowhere... OK

In: serial

Out: serial

Err: serial

[BL31]: tee size: 0

[BL31]: tee size: 0

Net: eth0: ethernet@c9410000

Hit any key to stop autoboot: 0

Card did not respond to voltage select! : -110

switch to partitions #0, OK

mmc1 is current device

Scanning mmc 1:1...

Found /extlinux/extlinux.conf

Retrieving file: /extlinux/extlinux.conf

1: LibreELEC

Retrieving file: /KERNEL

append: boot=LABEL=LIBREELEC disk=LABEL=STORAGE quiet systemd.debug_shell=ttyAML
0 console=ttyAML0,115200n8 console=tty0

Retrieving file: /amlogic/meson-gxl-s905x-p212.dtb

Booting kernel from Legacy Image at 08080000 ...

Image Name:

Image Type: AArch64 Linux Kernel Image (lzo compressed)

Data Size: 13192986 Bytes = 12.6 MiB

Load Address: 01d80000

Entry Point: 01d80000

Verifying Checksum ... OK

Flattened Device Tree blob at 08008000

Booting using the fdt blob at 0x8008000

Working FDT set to 8008000

Uncompressing Kernel Image to 1d80000

Moving Image from 0x1d80000 to 0x1e00000, end=0x3ad0000

Loading Device Tree to 000000003cf48000, end 000000003cf54d90 ... OK

Working FDT set to 3cf48000

Starting kernel ...

[0.000000] OF: reserved mem: failed to allocate memory for node 'linux,cma':
size 896 MiB

[BL31]: tee size: 0

domain-0 init dvfs: 4

[0.902270] Internal error: Oops - Undefined instruction: 0000000002000000 [#
1] SMP

[0.902568] Unable to handle kernel paging request at virtual address fffed60
03fd92518

[0.904433] Modules linked in:

[0.904467] Mem abort info:

[0.912280]

[0.912297] ESR = 0x0000000096000004

[0.912316] CPU: 2 UID: 0 PID: 0 Comm: swapper/2 Not tainted 6.16.0-rc3 #1 VO
LUNTARY

[0.913733] dwc3-meson-g12a d0078080.usb: USB2 ports: 2

[0.913754] dwc3-meson-g12a d0078080.usb: USB3 ports: 0

[0.915300] EC = 0x25: DABT (current EL), IL = 32 bits

[0.915325] Hardware name: Amlogic Meson GXL (S905X) P212 Development Board (
DT)

[0.915359] SET = 0, FnV = 0

[0.915385] pstate: 20000005 (nzCv daif -PAN -UAO -TCO -DIT -SSBS BTYPE=--)

[0.915406] EA = 0, S1PTW = 0

[0.915428] pc : idle_cpu+0x0/0x4c

[0.915459] FSC = 0x04: level 0 translation fault

[0.915475] lr : sched_balance_find_src_group+0x638/0xc08

[0.915504] Data abort info:

[0.915519] sp : ffff800080013bc0

[0.915535] ISV = 0, ISS = 0x00000004, ISS2 = 0x00000000

[0.915558] x29: ffff800080013bc0

[0.915581] CM = 0, WnR = 0, TnD = 0, TagAccess = 0

[0.915598] x28: ffff800080013e40

[0.915617] GCS = 0, Overlay = 0, DirtyBit = 0, Xs = 0

[0.915641] x27: ffffc1de57a19e78

[0.915658] [fffd6003fd92518] address between user and kernel address ranges

[0.915679]

[1.020871] x26: ffff000001104600 x25: ffff000001104580 x24: 0000000000000003

[1.027942] x23: 000000000000bc33 x22: 0000000000000000 x21: 0000000000000013

[1.035014] x20: ffff00003fdbfd00 x19: ffff800080013c48 x18: 0000000000000001

[1.042087] x17: ffff3e21e8630000 x16: ffff800080010000 x15: ffff00003fda9d00

[1.049159] x14: 0000000000000000 x13: 000000000000001fe x12: 0000000000145a5b

[1.056232] x11: 0000000000000009 x10: 0000000000000000 x9 : 0000000000000075

[1.063304] x8 : 00000000000000116 x7 : 0000000000000000 x6 : ffff3e21e8646000

[1.070377] x5 : ffff3e21e8646000 x4 : 00000000000000116 x3 : ffff00003fdbfd00

[1.077449] x2 : 0000000000000000 x1 : 0000000000000000 x0 : 0000000000000003

[1.084523] Call trace:

[1.086938] idle_cpu+0x0/0x4c (P)

[1.090301] sched_balance_rq+0x168/0xb2c

[1.094268] sched_balance_domains+0x260/0x39c

[1.098667] sched_balance_softirq+0x4c/0x68

[1.102893] handle_softirqs+0x104/0x260

[1.106774] __do_softirq+0x10/0x18

[1.110224] ____do_softirq+0xc/0x14

[1.113760] call_on_irq_stack+0x24/0x34

[1.117642] do_softirq_own_stack+0x18/0x24

[1.121782] __irq_exit_rcu+0xd0/0x104

[1.125491] irq_exit_rcu+0xc/0x14

[1.128854] el1_interrupt+0x44/0x8c