

ASRockInd Technical Reference - Q&A

Question	My motherboard displays distorted screen with GUI mode in Ubuntu 22.04.5 or later version through VGA port, what should I do?
Release date	2026/03/09
Product	IMB-X1902, IMB-X1902-10G, IMB-X1904, IMB-X1904-10G
FAQ type	<input type="checkbox"/> Specification <input checked="" type="checkbox"/> OS & Driver <input type="checkbox"/> Application <input type="checkbox"/> BIOS/FW <input type="checkbox"/> Others

Answer:

SM750 IC of IMB-X1902, IMB-X1904 series requires new display driver (v2.4.1.0).

Please refer the following steps to remove old SM750 driver and install new driver.

1-1. Enter console mode of Ubuntu then type following command.

1-2. `cd /lib/modules/"The Kernel Version"/kernel/drivers/staging/sm750fb/` (Please type "uname -r" to check your Kernel version)

1-3. `mv sm750fb.ko sm750fb.ko.bak`

1-4. `depmod -a`

1-5. `update-initramfs -u`

1-6. Reboot

The display should work properly on GUI mode, then please execute terminal and type following command.

Download the driver of SM750: https://download.asrock.com/IPC_TSD/trunk2.4.1.0.zip

2-1. `sudo apt update`

2-2. `sudo apt install make`

2-3. `sudo apt install gcc-12 g++-12 gcc-13 g++-13`

2-4. `cd "the location of driver(trunk2.4.1.0) folder"`

2-5. `make install`

2-6. `depmod -a`

2-7. reboot

Go to `/var/log/dmesg.log` then check if there is initialized message of SM750 driver as following picture.

```
[ 2.397544] kernel: RAPL PMU: hw unit of domain psys 2^-8 Joules
[ 2.403095] kernel: Creating 1 MTD partitions on "0000:00:1f.5":
[ 2.403103] kernel: 0x000000000000-0x000002000000 : "BIOS"
[ 2.415740] kernel: cryptd: max_cpu_qlen set to 1000
[ 2.478344] kernel: AVX2 version of gcm_enc/dec engaged.
[ 2.478608] kernel: AES CTR mode by8 optimization enabled
[ 2.539655] kernel: smifb: loading out-of-tree module taints kernel.
[ 2.539661] kernel: smifb: module verification failed: signature and/or required key missing - tainting kernel
[ 2.541907] kernel: +-----SMI Driver Information-----+5
[ 2.541914] kernel: Release type: Linux DRM Display Driver Release
[ 2.541917] kernel: Driver version: v2.4.1.0
[ 2.541920] kernel: Support products: SM750, SM768
[ 2.541921] kernel: +-----+
[ 2.545915] kernel: Console: switching to colour dummy device 80x25
[ 2.561982] kernel: smifb 0000:04:00.0: vgaarb: deactivate vga console
[ 2.562137] kernel: Found SM750 Chip
[ 2.566333] kernel: [drm] Initialized smifb 2.4.1 20250626 for 0000:04:00.0 on minor 1
```

*The driver supports Kernel 5.x or later

**Adjust the resolution up to 1280*1240