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**兼**


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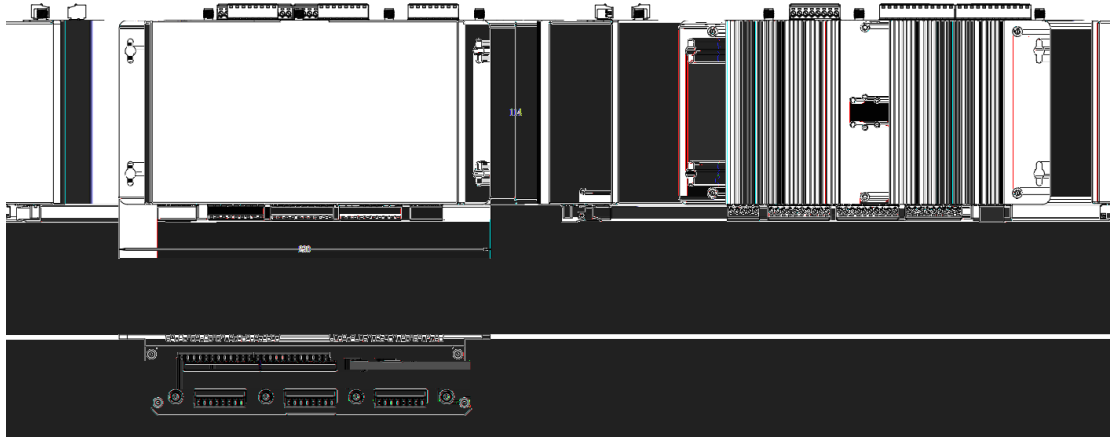
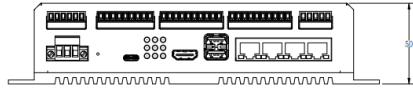




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LAN1      LAN2      LAN3      LAN4



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USB



iConsole

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HDMI



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```
$ ifconfig lan1 broadcast 192.168.1.255 # lan1
$ ifconfig lan1 -broadcast # lan1
```

```
$ ifconfig lan1 mtu 1500 # lan1 1500 bytes
```

```
$ ifconfig lan1 promisc #
$ ifconfig lan1 -promisc #
```

```
$ sudo vi /etc/netplan/01-network-manager-all.yaml
```

```
network:
  # 2
  version: 2
  #
  renderer: networkd
  #
  ethernets:
    #
    lan1:
      #DHCP yes IP
      dhcp4: yes
    lan2:
      dhcp4: no
      # IP
      addresses:
        - 192.168.2.2/24
      #
      gateway4: 192.168.2.1
      #DNS
      nameservers:
        addresses: [8.8.8.8]
    lan3:
```

```
dhcp4: no
addresses:
  - 192.168.3.2/24
gateway4: 192.168.3.1
nameservers:
  addresses: [8.8.8.8]
lan4:
dhcp4: no
addresses:
  - 192.168.4.2/24
gateway4: 192.168.4.1
nameservers:
  addresses: [8.8.8.8]
```

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```
$ sudo netplan apply
```

```
$ ip addr

10 wlan0 NO CARRIER BROADCAST MULTICAST UP LOWER_UP mtu 1500 qdisc
pfifo_fast state DORMANT group qlen 1000
link ether 70 f7 54 ee 4f 0d brd ff ff ff ff ff ff
```

```
# WIFI
nmcli device wifi list
# <ssid> WIFI SSID
nmcli device wifi connect ssid
# <ssid> WIFI SSID <psk> WIFI
```

```
nmcli device wifi connect ssid password psk
#
nmcli device status
```

```
# connection
# WIFI_NAME WIFI_SSID WIFI_PSK
nmcli device wifi hotspot ifname wlan0 con name WIFI_NAME ssid
WIFI_SSID
password WIFI_PSK
nmcli connection modify WIFI_NAME connection autoconnect yes
```

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```
root@rk3568 # cat
sys devices system cpu cpufreq policy0 scaling_cur_freq
408000
```

```
root@rk3568 # cat sys class thermal thermal_zone*/temp
44375
43750
```

42500

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```
# /sbin/ip link set can0 type can bitrate 1000000
# /sbin/ip link set can1 type can bitrate 1000000
# /sbin/ip link set can2 type can bitrate 1000000
```

```
# ifconfig can0 up
# ifconfig can1 up
# ifconfig can2 up
```

```
# ifconfig can0 down
# ifconfig can1 down
# ifconfig can2 down
```

□

```
# sudo apt-get update
# sudo apt-get install can-utils
```

□

```
# candump can0
```

```
□
```

```
# cangen can0 -D 1122334455667788 -L 8
```

```
# cansend can0 123#1122334455667788
```

```
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```

```
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```

```
root@ubuntu:/prj2/test# ls  
afptool rk356x-mkupdate.sh rkImageMaker unpack.sh update.img  
root@ubuntu:/prj2/test# █
```

```
# update.img
```

```
□
```

```

root@ubuntu:/prj2/test# ./unpack.sh update.img
*****rkImageMaker ver 2.23*****
Unpacking image, please wait...
Exporting boot.bin
Exporting firmware.img
Unpacking image success.
Android Firmware Package Tool v2.27
Check file... OK
----- UNPACK -----
out/package-file      offset=0x800      size=0xF1
out/parameter.txt    offset=0x1000     size=0x209
out/MiniLoaderAll.bin offset=0x1800     size=0x6F9C0
out/uboot.img        offset=0x71800   size=0x400000
out/misc.img         offset=0x471800  size=0xC000
out/boot.img         offset=0x47D800  size=0x22CBE00
out/recovery.img     offset=0x2749800 size=0x2925C00
out/rootfs.img       offset=0x506F800 size=0x5B400000
out/oem.img          offset=0x6046F800 size=0x10A6000
out/grems.img        offset=0x61515800 size=0x403000
out/userdata.img     offset=0x61918800 size=0x446000
Unpack firmware OK!
----- OK -----
root@ubuntu:/prj2/test# █

```

```

root@ubuntu:/prj2/test# ls out/
boot.bin  firmware.img  MiniLoaderAll.bin  oem.img  parameter.txt  rootfs.img  userdata.img
boot.img  grems.img     misc.img           package-file  recovery.img  uboot.img
root@ubuntu:/prj2/test# █

```

```

#          rootfs.img
mkdir rootfs

#
sudo mount out/rootfs.img rootfs/

#
df -h

```

```

root@ubuntu:/prj2/test# df -h
Filesystem      Size  Used Avail Use% Mounted on
udev            956M   0 956M   0% /dev
tmpfs           198M  24M 174M  12% /run
/dev/sda1       39G   29G  7.8G  79% /
tmpfs           986M 192K 985M   1% /dev/shm
tmpfs           5.0M   0 5.0M   0% /run/lock
tmpfs           986M   0 986M   0% /sys/fs/cgroup
/dev/sdb        40G   20G  18G  53% /prj2
tmpfs           198M  28K 197M   1% /run/user/108
tmpfs           198M   0 198M   0% /run/user/0
/dev/loop0      1.4G  1.2G 106M  92% /prj2/test/rootfs
  
```

```

#           etc
cd rootfs/etc

#  etc
touch update-test
  
```

```

root@ubuntu:/prj2/test/rootfs/etc# ls
alsa                factory             inittab            localtime          pm                 socketcand.conf
bash.bashrc         fonts              input-event-daemon.conf mke2fs.conf       profile           ssh
bash_completion.d  fstab              input-event-daemon.conf.d mtab              profile.d         ssl
bindresvport.blacklist generate_logs.d    inputrc            my.cnf            protocols        timezone
collectd.conf       group              iproute2          mysql             pulse            udev
cups                hostapd            iptables.conf     netconfig        rc_keymaps       update-test
dbus-1              hostapd.accept    irqbalance.d      network          rc.local         usbmount
dhcpcd.conf         hostapd.conf      issue             nfsmount.conf    rc_maps.cfg     version
dnsmasq.conf       hostapd.deny      ld.so.cache       nsswitch.conf    resolv.conf     watchdog.conf
dropbear           hostname          libinput          ntp.conf         services        watchdogd.conf
ethertypes         hosts             libnl             os-release       shadow          wpa_supplicant.conf
exports            init.d            libnl             passwd           shells          xdg
root@ubuntu:/prj2/test/rootfs/etc#
  
```

```

#  rootfs/
cd ../../

# /etc
sudo umount rootfs/
  
```





