
HDK8150 (SM8150P) Development Kit Quick Start Guide



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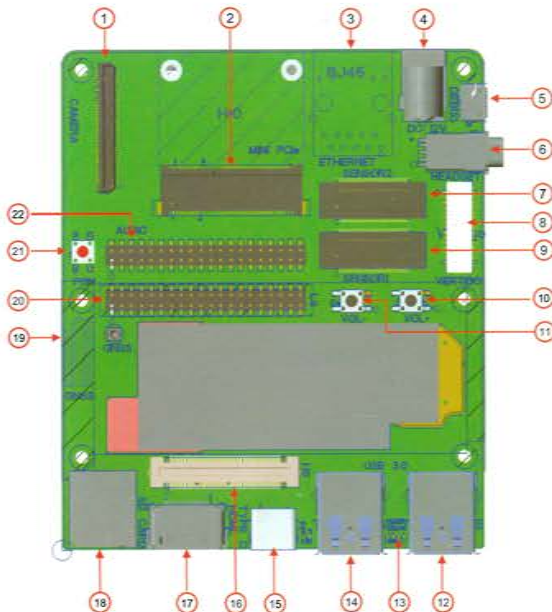
- Main Board Top
- Main Board Bottom
- Expansion Card Top
- Expansion Card Bottom
- Development Kit Accessories
- Development Kit Setup – HDMI Mode
- Development Kit Setup – Display Mode
- Development Kit Support
- Questions?

Main Board Top

Package Contents

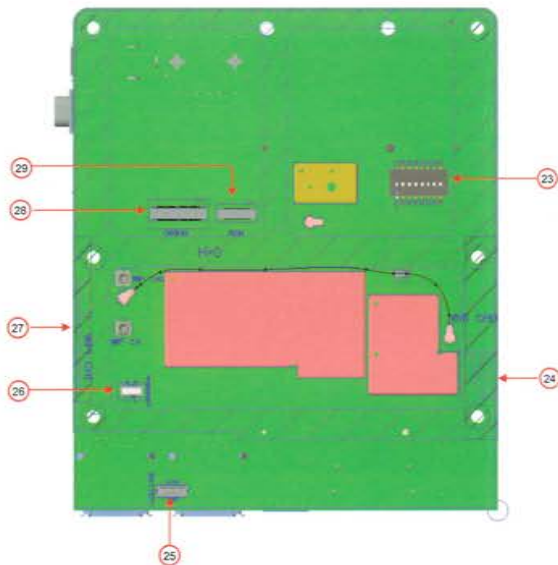
1. Main Board with SM8150P processor
2. 12V AC power adaptor
3. USB cable
4. Display Card (optional)
5. Camera Card (optional)
6. Battery (optional)

1. Camera Card Connector
2. Mini PCIe
3. Ethernet (Reserve)
4. 12V DC Jack
5. Debug Port
6. 3.5mm Headset Jack
7. Sensor Port2
8. Vertigo
9. Sensor Port1
10. Volume+ key
11. Volume- key
12. USB3.0 Type-A
13. User LEDs
14. USB3.0 Type-A
15. USB Type-C
16. High Speed Expansion(Display)
17. HDMI Connector
18. SD Socket
19. GNSS Antenna
20. Low Speed Expansion
21. Power On Key
22. Audio Expansion



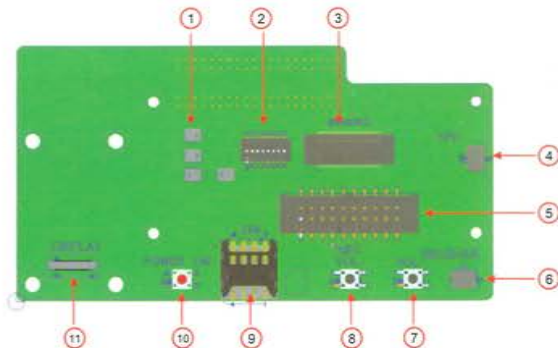
Main Board Bottom

- 23. Boot Config Switch(S0501)
- 24. Wi-Fi CH0 Antenna
- 25. Battery Connector
- 26. Finger Print Connector
- 27. Wi-Fi CH0 Antenna
- 28. QRD Debug Connector
- 29. RCM Connector



Expansion Card Top

1. Microphones
2. Sensor Port3 Switch(S901)
3. Sensor Port3
4. Speaker Connector
5. NFC Expansion
6. Receiver Connector
7. Volume +
8. Volume -
9. SIM Socket
10. Power On
11. Display FPC Connector

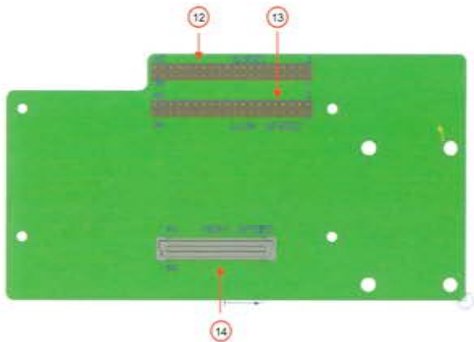


Expansion Card Bottom

12. Audio Expansion

13. Low Speed Expansion

14. High Speed Expansion(Display)



Development Kit Accessories

Display Card
(Display+Expansion Card)
(65-PK457-2)

Camera Card
(10-PB211-1)

Sensor Card
(20-PL680-H1)

12V AC Adaptor

Battery
(Optional)

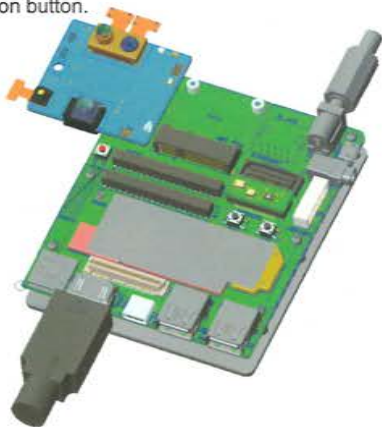
Main Board
(20-PL592-H10)

Expansion Card
(20-PL740-H1)



Development Kit Setup – HDMI Mode(Default)

1. Turn off switch8 of S0501(on the bottom side).
2. Insert HDMI cable.
3. Insert USB mouse and keyboard.
4. Insert the 12V AC adaptor.
5. Push the power on button.

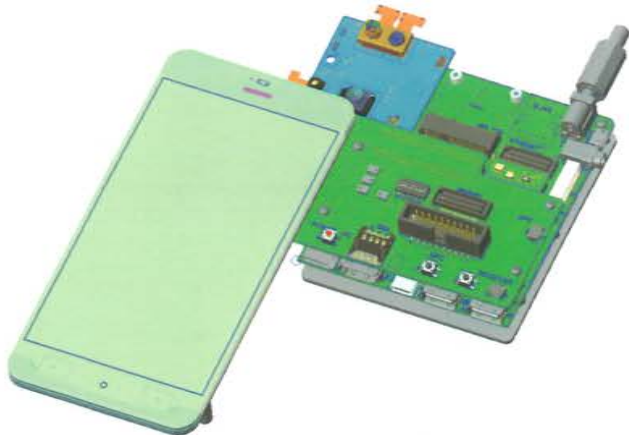


Note: HDMI is the default bring up mode after image flashing.

For the first time power on after transition from display mode, please execute below commands,
adb reboot bootloader
fastboot oem select-display-panel none
fastboot reboot

Development Kit Setup – Display Mode

1. Turn on switch8 of S0501(on the bottom side).
2. Install the Display Card.
3. Insert 12V AC adaptor.
4. Push the power on button.



Note: For the first time power on after transition from HDMI mode, please execute below commands,

```
adb reboot bootloader
fastboot oem select-display-panel nt36850_truly_wqhd_cmd
fastboot reboot
```

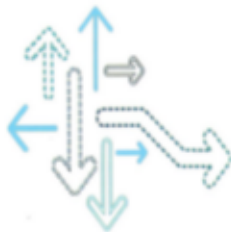
Emergency Download

1. Turn on switch5 of S0501.
2. Insert the 12V AC adaptor.
3. Push the power on button.
4. Insert USB Type-C cable and get port 9008 probed.



Development Kit Support

To access documentation and software updates please register at:
<http://tech.intrinsyc.com>



Questions?

<https://helpdesk.intrinsyc.com>