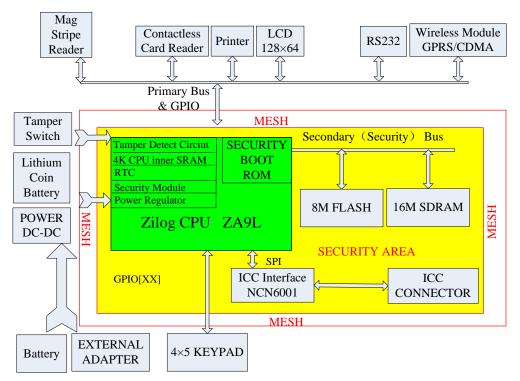
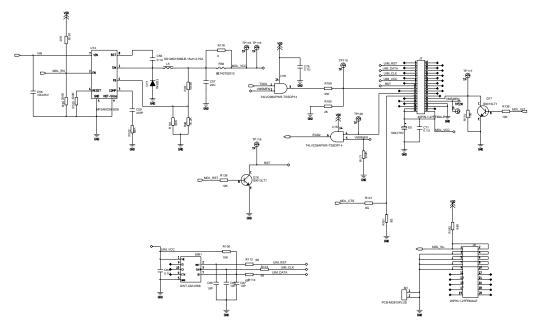
## **NEW8110** circuit description V1.0

In the design of NEW8110, ZA9L, a security CPU, takes charge of the system security and completes all service for transaction, including controlling LCD, Keypad, printer, wireless module, MSR and ICC reader. The figure shows the system block of NEW8110. The part highlighted in yellow indicates the Security Area, protected by mesh. The green part indicates ZA9L.

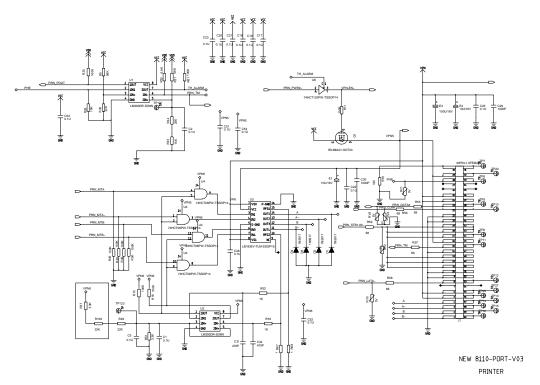


The power system offers 5V, 3.3V and 1.8V.

ZA9L sends and receives data form server via wireless module (ME3000/MG815+) with the help of UART control.

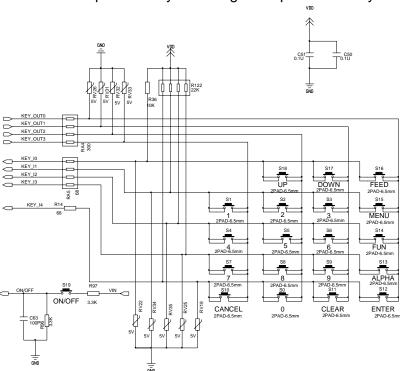


The thermal printer adopts FTP-628MCL101 provided by fujisu. Any over temperature or current print will results in shutting off power and stepping into protection status. The module uses 30 PIN connectors to communicate with CPU and get power.

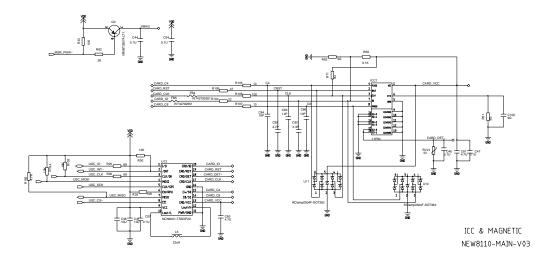


The minimum system consists of CPU(ZA9L0), SDRAM(HY57V281620E) and FLASH(S29GL064A90TFIR). During power on, the boot will load the program in FLASH into SDRAM and executes it in SDRAM.

NEW8110 adopts IO array scanning to acquire PIN entry information.



As for ICC reader, NEW8110 uses NCN6001 to read and write ICC card.



As for magnetic strip reader, NEW8110 uses magtech module to acquire magnetic strip data by 5 PIN connectors. The related schematic is shown below,

