

1. architecture

discrete component & IC/chip (FPGA <- ASIC)

a. non-program-based circuit

b. program-based circuit (computer): CPU-Type MCU(DSP)-TYPE

mcu internal interface peripheral

2. EDA(Electronic design automation)

①schematic&PCB&CAM:altium cadence cam350

②simulation:proteus multism ADS pspice apsim

③algorithm design:matlab

④MCU/DSP programming:keil IAR CCS

⑤PLC development:quartus

⑥product-level simulation:hfss ansys

⑦diagramming:visio