

SA-

Part- 2

Ans Advantages of SPI over UART

- High speed
- full duplex

UART used for point to point communication

2 Ans

QFN	DIP
very small	large
soldering is difficult	easy soldering

3 Ans It reduces the Electromagnetic Interference, if it is not present the PCB efficiency decreases.

4 Ans

$$\text{voltage resolution} = \frac{3.3V}{2^{10}}$$

$$= 3.22 \text{ mV}$$

$$\approx 3 \text{ mV}$$

noise degrades accuracy

6A-

5A. It helps to enable fine biasing
and detection

6A. We can use

- Heat sink
- Thermal vias to dissipate heat.