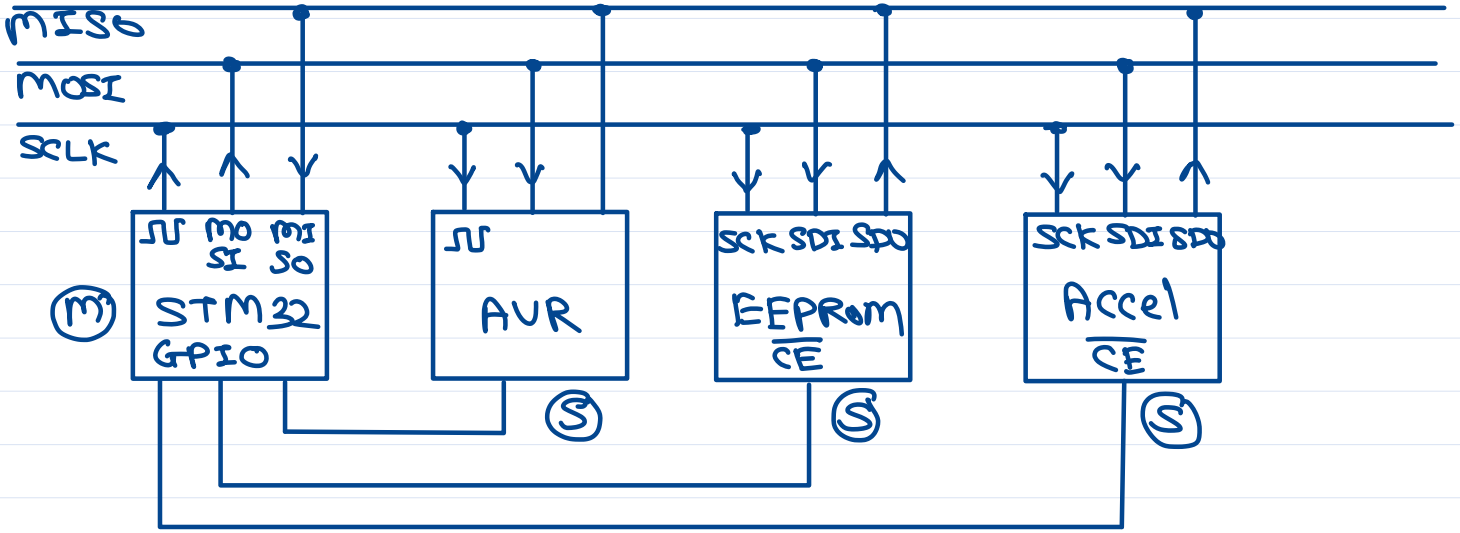
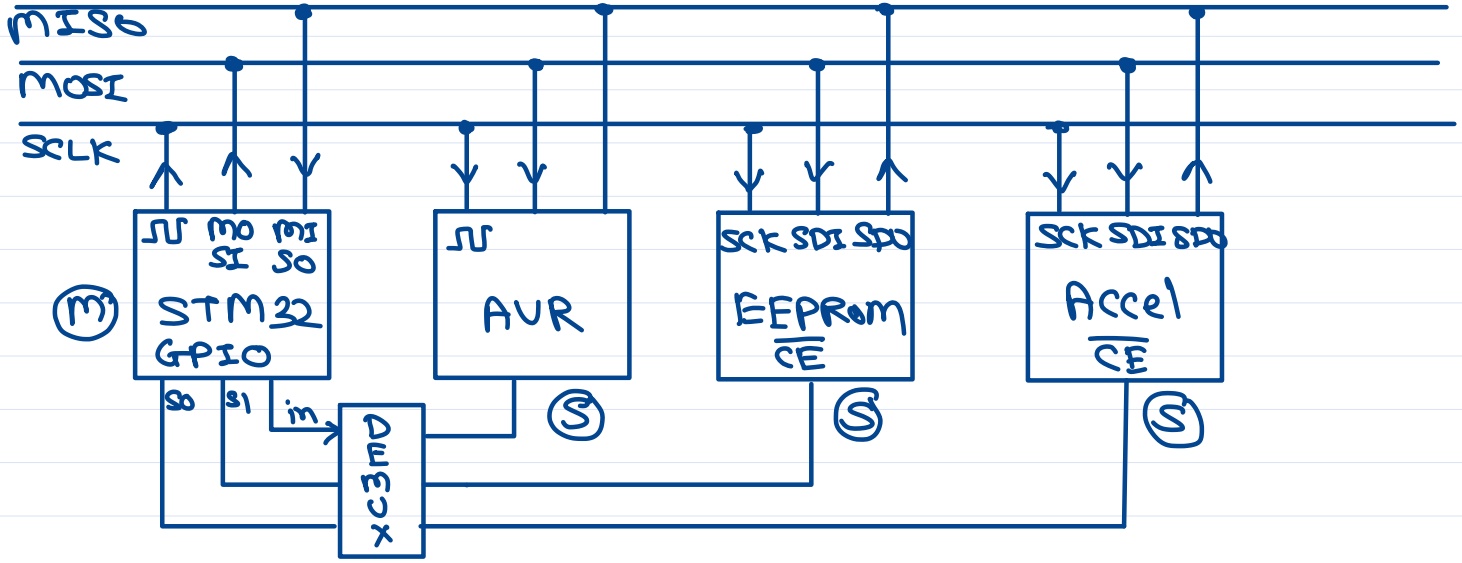
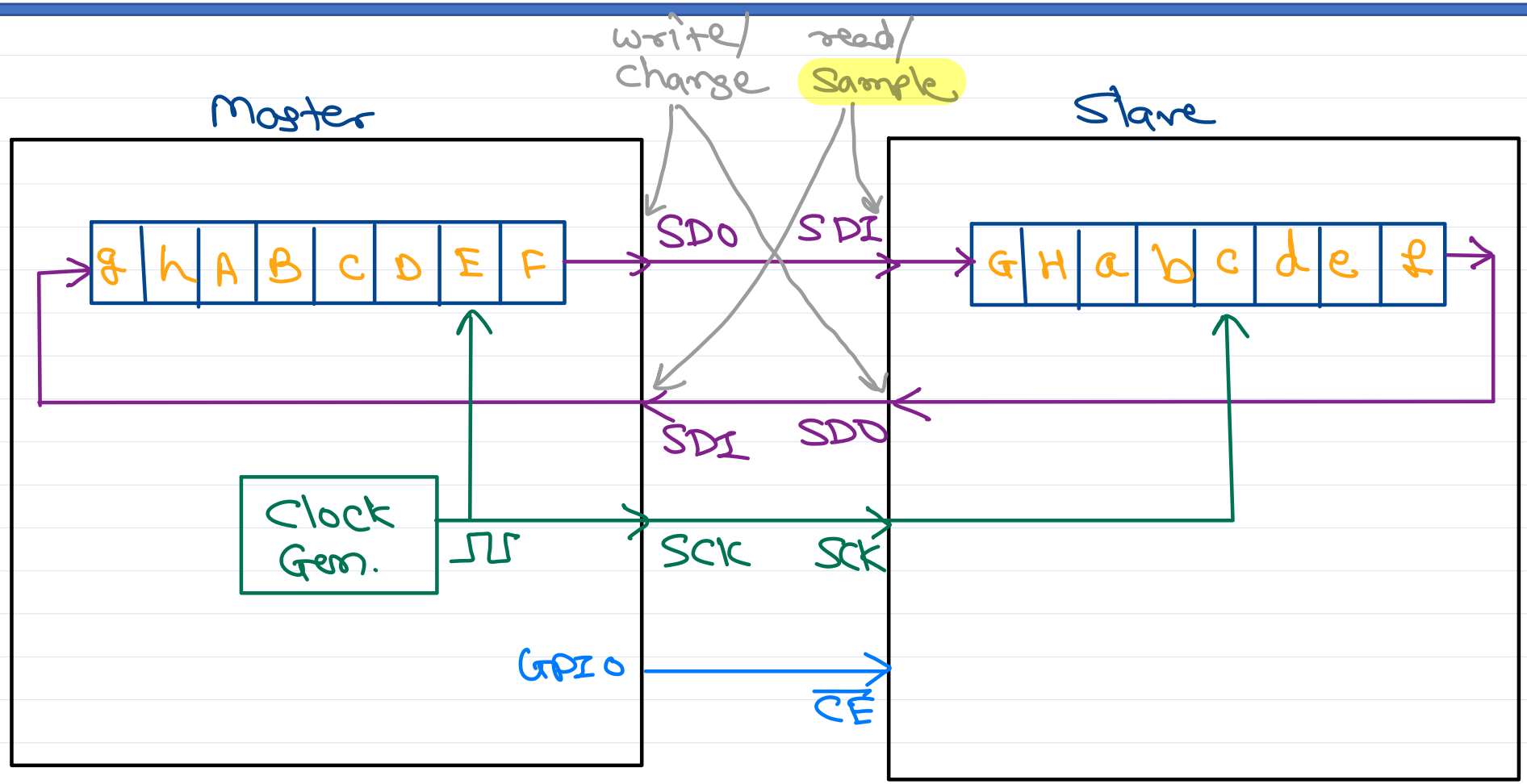
SPI

1. Motorola
2. Short distance comm^{n}
3. 4-wire protocol
   - MOSI / SDO
   - MISO / SDI
   - SCLK / SCK
   - SSEL / CE
4. Bus protocol
5. Multi-master bus
6. Full-duplex protocol
8. TTL voltage levels
9. KHz – MHz
10. Synchronous protocol

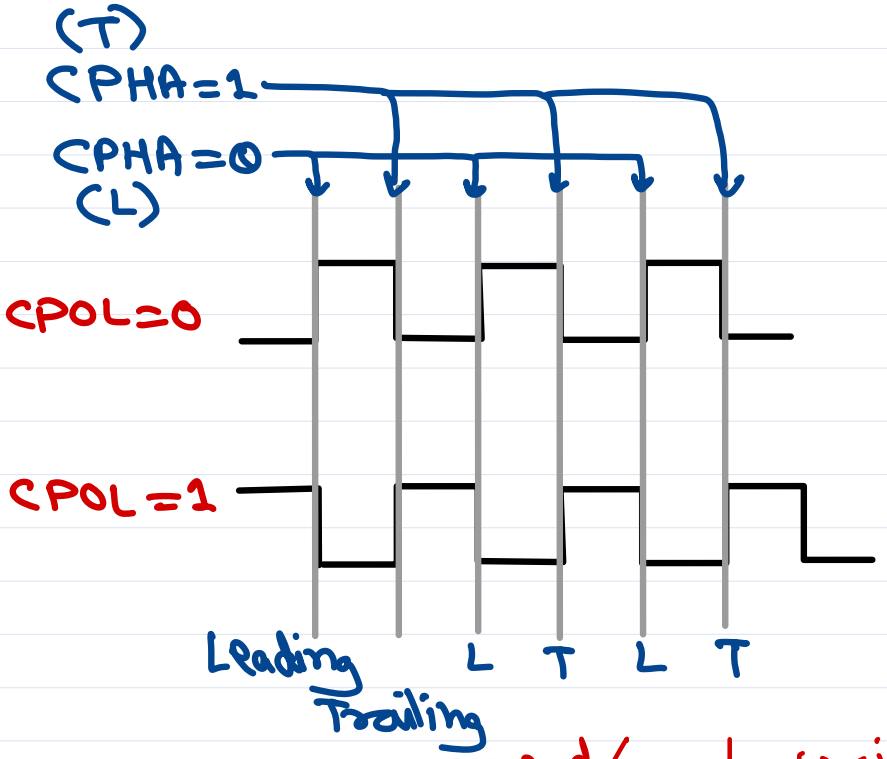




SPI communication

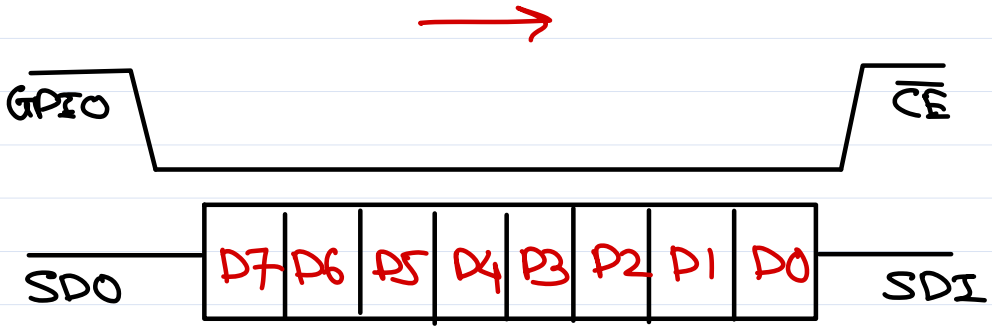


SPI bit format



CPOL	CPHA	read/ Sample	write/ change
0	0	↑	↓
0	1	↓	↑
1	0	↓	↑
1	1	↑	↓

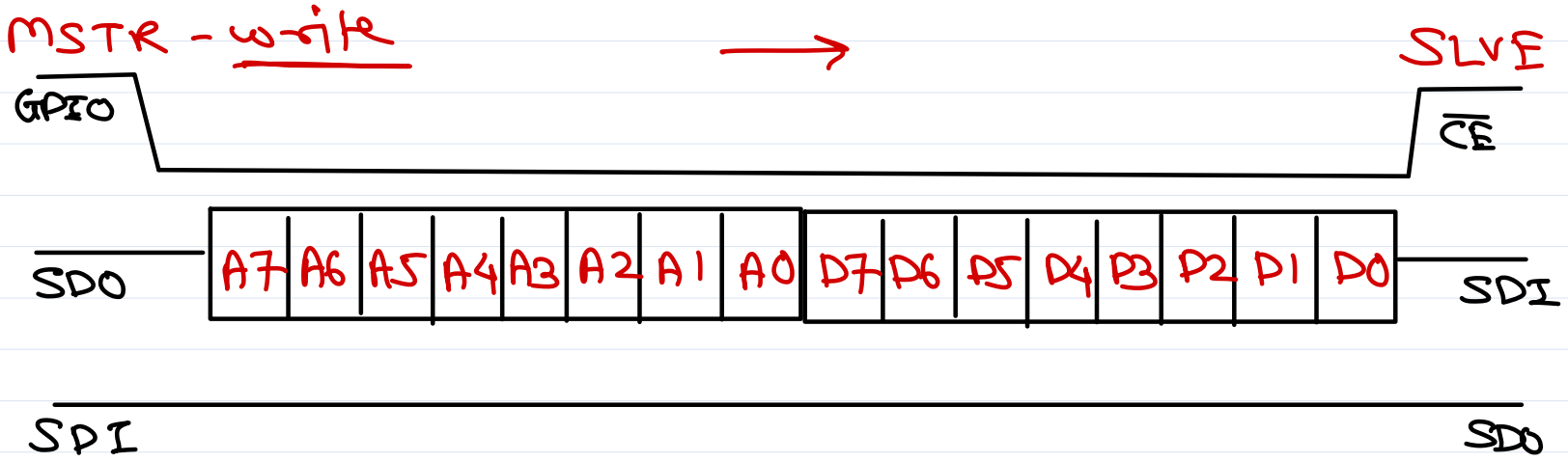
SPI Byte Format

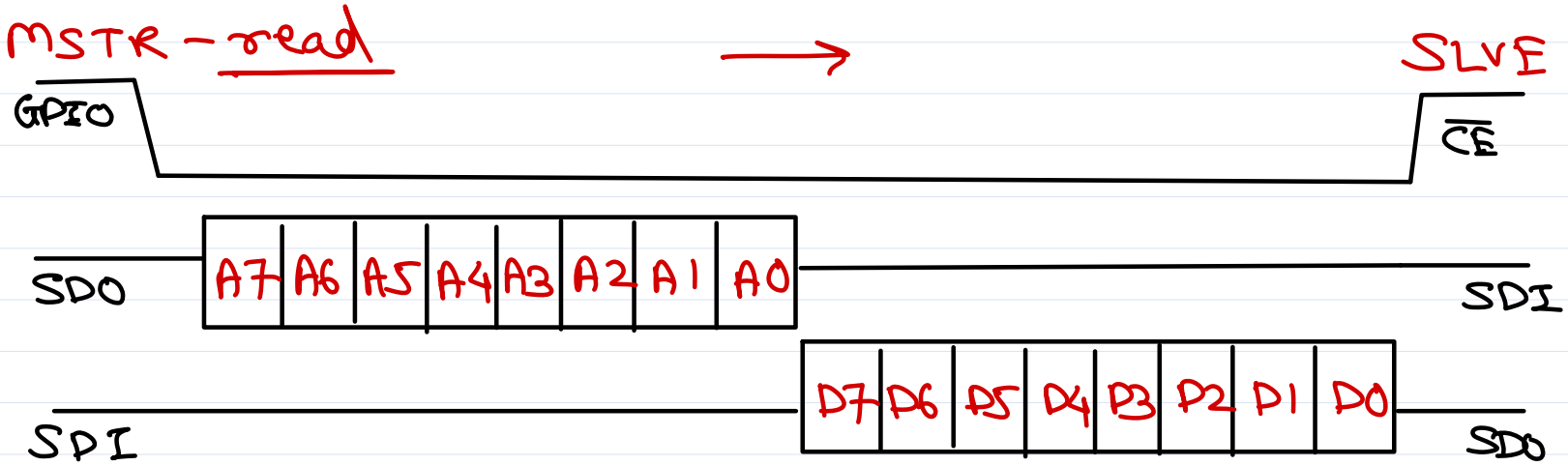


SPI devices

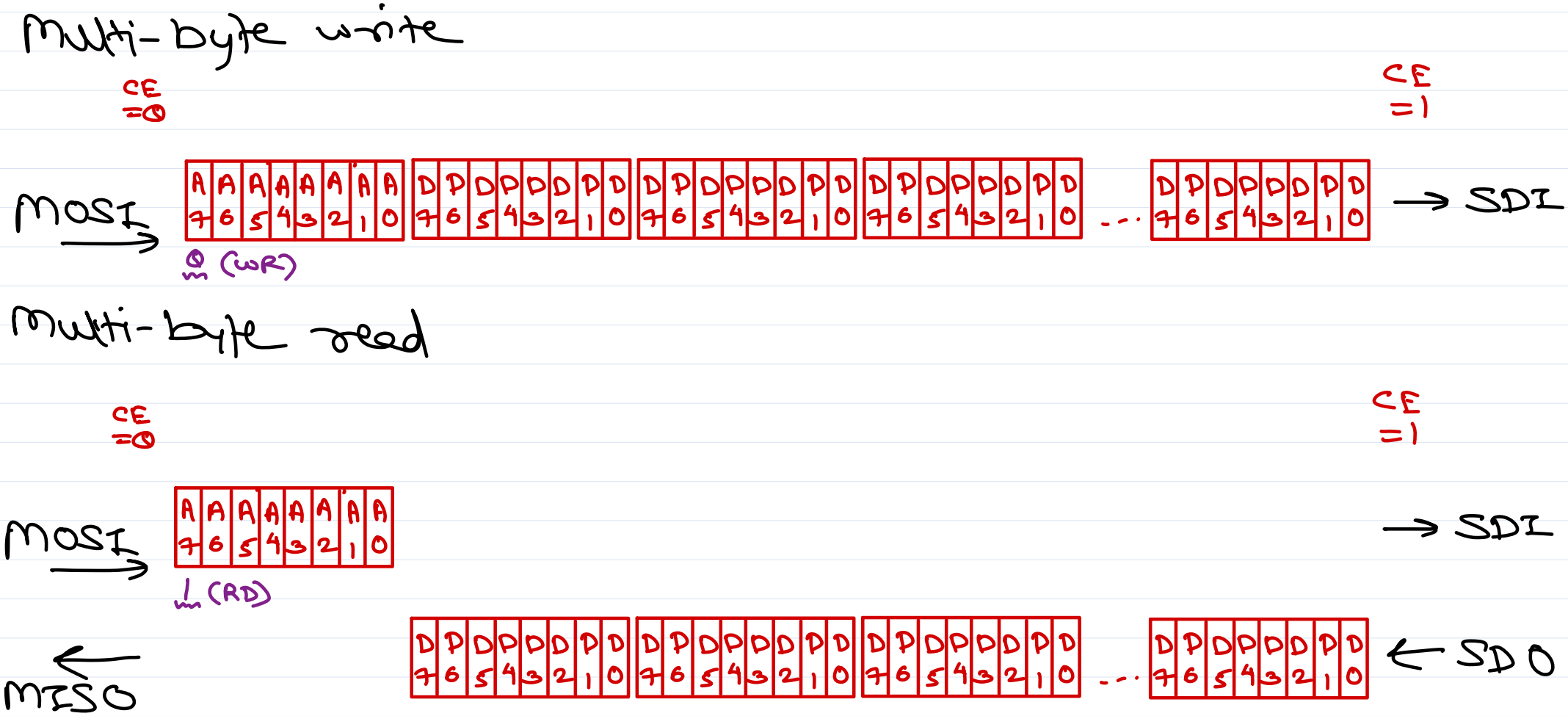
1. Accel
2. LCD
3. RTC
4. 7-seg
5. EEPROM
6. SD card *

SPI Byte read/write operation





SPI data transfer



Thank you!

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