**ADC 0809**

**unsigned int ADC09\_Start( bit Mux\_Addr\_C, bit Mux\_Addr\_B, bit Mux\_Addr\_A )**

for( i=0; i<10; i++ ) repeating test loop for 10 times

ADC\_Final = 0; ADC\_Data\_Arr[0] = 0; ADC final variable & ADC data arrays are initialized to 0

ADC09\_MUX\_A = Mux\_Addr\_A; ADC09\_MUX\_B = Mux\_Addr\_B; ADC09\_MUX\_C = Mux\_Addr\_C; Assigning values to the ADC selection lines

unsigned char i=0; character variable I is initialized to 0

ADC09\_START = 0; indicates that conversion is finished

ADC09\_START = 1; Analog to digital conversion will be started

ADC\_Data\_Arr[i] = P0; Converted value will be stored in an array

ADC\_Final = ADC\_Final + ADC\_Data\_Arr[i]; ADC\_Final = ADC\_Final / 10; covrted values will be added & divided by 10 to get the average value

Volt\_Value[i] = (Volt\_Temp%10) + 48; Volt\_Temp = Volt\_Temp / 10;

to convert voltage value from digital format in to character format

Voltage =(unsigned int)((( ADC\_Final \* 5.0 ) / 255.0 ) \* 100.0); Converts digital value to required voltage value