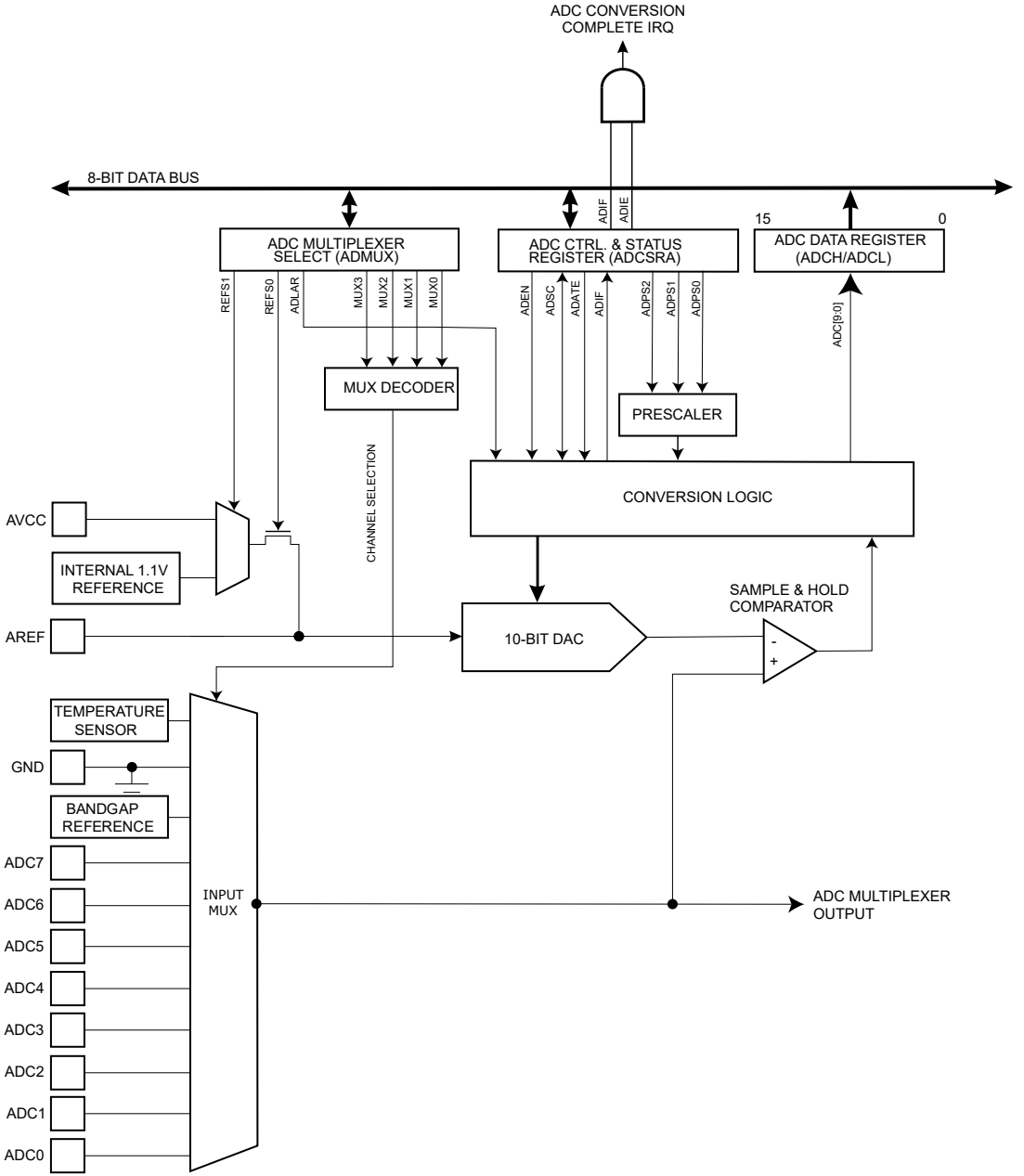
ADC CONVERSION COMPLETE IRQ
8-BIT DATA BUS
ADIF
ADIE
15
0
ADC MULTIPLEXER SELECT (ADMUX)
ADC CTRL. & STATUS REGISTER (ADCSRA)
ADC DATA REGISTER (ADCH/ADCL)
REFS1
REFS0
ADLAR
MUX3
MUX2
MUX1
MUX0
ADEN
ADSC
ADATE
ADIF
ADPS2
ADPS1
ADPS0
ADC[9:0]
MUX DECODER
PRESCALER
CHANNEL SELECTION
CONVERSION LOGIC
AVCC
INTERNAL 1.1V REFERENCE
AREF
10-BIT DAC
SAMPLE & HOLD COMPARATOR
-
+
TEMPERATURE SENSOR
GND
BANDGAP REFERENCE
ADC7
ADC6
ADC5
ADC4
ADC3
ADC2
ADC1
ADC0
INPUT MUX
ADC MULTIPLEXER OUTPUT