

(3) (GBP) 1 MHz , a_0 가 100dB , f_a 가 10 Hz op amp 가

(a) Open-loop gain $|a|_{dB}$.

(b) 1000 3 dB f_A 가 10 kHz

(c) 100 , 3 dB f_A 가 100 Hz

(4) 220V, 60Hz dc 5V ,

(5) DAC ADC .

(a) R-2R ladder 4-bit DAC .

V_{REF} 5 V , V_{FSR} 10 V 가 .

, DAC LSB V .

(b) 4-bit successive approximation ADC 0 – 1 V .

0.63 V , ADC