

Figure 4 The Schematic of A CPLD-based USM Drive

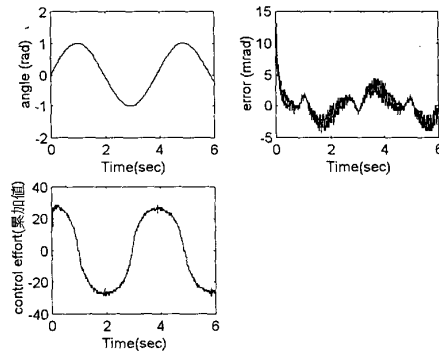


Figure 5 The Step-response Under No-Load; the rotor inertial is $0.5 \text{ Kg}\cdot\text{cm}^2$

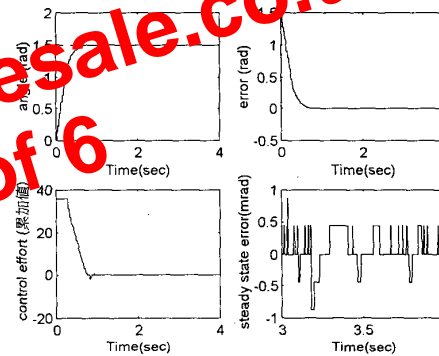


Figure 6 The Step-response for rotor +load inertial is $5 \text{ Kg}\cdot\text{cm}^2$

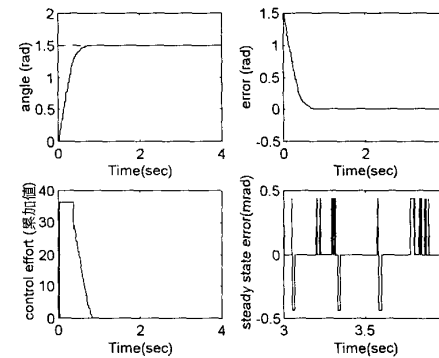


Figure 7 The Sinusoidal tracking (0.25 Hz) for rotor+load inertial = $5 \text{ Kg}\cdot\text{cm}^2$