ABBREVIATIONS

A/D - analog to digital converter
AI - artificial intelligence
ASIC - application specific integrated circuit
ASM196 – assembly language /assembler for 80C196KB
BIOS - basic input/output subroutines
BJT - bipolar junction transistor
BLDC - brushless DC motor
CAM - content addressable memory
COA - center of area method of defuzzification
COG - center of gravity method of defuzzification
CPU - central processing unit
CSI - current source inverter
D/A - digital to analog converter
DAS - data acquisition system
DMA - direct memory access
DSP - digital signal processor
EPHSC - embedded programmable high-speed controller
EPROM - erasable programmable read only memory
FAM - fuzzy associated memory
FKBC - fuzzy knowledge based controller
FLC - fuzzy logic controller
FLIPS - fuzzy logic inference per second
FMRLC - fuzzy model reference learning controller
FOC - field oriented control
GM1 - gate of MOSFET 1
GM2 - gate of MOSFET 2
GM3 - gate of MOSFET 3
GM4 - gate of MOSFET 4
GMDSC- generic multi-drive scalable controller
GTO - gate turn off thyristor
HSI - high speed input
HSO - high speed output
IC - integrated circuit
IE - inference engine
IGBT - inducted gate bipolar transistor
IP - integral proportional
ISR - integrated service routine /interrupt subroutine
LMS - least mean squared algorithm
MAC - multiply/accumulator
MCT - MOS. controllable thyristor
MF’s - membership function
MISO - multi input single output
MOSFET - metal Oxide semiconductor FET
PWM - pulse width modulation
MRAC - model reference adaptive control
N- MOSFET - N-channel MOSFET
OTPROM – one time programmable read only memory
P - proportional controller
PA - power amplifier
PI - proportional integral
PID - proportional integral derivative
PLM- 96 – programmable language for MCS96 microcontrollers
PMDC - permanent magnet DC motor
P-MOSFET – P-channel MOSFET
PMSM - permanent magnet synchronous motor
PTS - peripheral transaction server
RAM - random access memory
RISC - reduced instruction set computing
RLS - recursive level square algorithm
RSS - route square sum
S/N - signal to noise ratio
SCIM - squirrel cage induction machine
SLMC - sliding mode control
SMFC - sliding mode fuzzy control
SOC  - start of conversion
SOFLC- self-organizing fuzzy logic controller
SRM  - Switch reluctance motor
SSMF’S- shrinking span membership function
SVM  - space vector modulation
UP/DN- up/down
WRIM - wound rotor induction machine
ZOH  - zero order hold