ADDRESSING

9/9/98

CRATE			MODULE					SECTION				SUBSECTION			
15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Address Bits 15,14 & 13 determine which crate will be addressed; these bits are not used for CDMS.
Address Bits 12 thru 8 determine which slot in crate is addressed
Address bits 7 thru 4 determine what section of module addressed
Address bits 3 thru 0 determine what in the section is addressed

Example given is for the ZIP Module

SECTIONS

FET TEMP	Fx
QET	Ex
SQUID D	Dx
SQUID C	Cx
SQUID B	Bx
SQUID A	Ax
	9x
	8x
	7x
DRIVERS	6x
	5x
	4x
Q BIAS	3x
Q AMP 2	2x
Q AMP 1	1x
MODULE INFORMATION	0x

SUBSECTION

Reset	F
A/D	E
MUX 2	D
MUX 1	C
DAC 1D	B
DAC 1C	A
DAC 1B	9
DAC 1A	8
DAC 0D	7
DAC 0C	6
DAC 0B	5
DAC 0A	4
CSR3	3
CSR2	2
CSR1	1
CSR0	0

x = SUBSECTION ADDRESS 0 THRU F

SQUID A		SQUID B	
	F		F
	E		E
	D		D
	C		C
	B		B
	A		A
	9		9
	8		8
	7		7
SQUID A DAC 0C	6	SQUID B DAC 0C	6
SQUID A DAC 0B	5	SQUID B DAC 0B	5
SQUID A DAC 0A	4	SQUID B DAC 0A	4
	3		3
	2		2
	1		1
SQUID A CSR(0)	0	SQUID B CSR(0)	0
BASE ADDRESS A0 +		BASE ADDRESS B0+	

SQUID C		SQUID D	
	F		F
	E		E
	D		D
	C		C
	B		B
	A		A
	9		9
	8		8
	7		7
SQUID C DAC 0C	6	SQUID D DAC 0C	6
SQUID C DAC 0B	5	SQUID D DAC 0B	5
SQUID C DAC 0A	4	SQUID D DAC 0A	4
	3		3
	2		2
	1		1
SQUID C CSR(0)	0	SQUID D CSR(0)	0
BASE ADDRESS C0 +		BASE ADDRESS D0+	

Q Amp 1		Q Amp 2	
	F		F
	E		E
	D		D
	C		C
	B		B
	A		A
	9		9
	8		8
	7		7
	6		6
	5		5
	4		4
	3		3
	2		2
	1		1
	0		0
BASE ADDRESS 10 +		BASE ADDRESS 20+	

Q Bias

	F
	E
	D
	C
	B
	A
	9
	8
QBIAS DAC 0D	7
QBIAS DAC 0C	6
QBIAS DAC 0B	5
QBIAS DAC 0A	4
	3
	2
QBIAS CSR(1)	1
QBIAS CSR(0)	0

BASE ADDRESS 30 +

QET

	F
	E
	D
	C
	B
	A
	9
	8
QET DAC 0D	7
QET DAC 0C	6
QET DAC 0B	5
QET DAC 0A	4
	3
Pulse Heater	2
	1
QET CSR(0)	0

BASE ADDRESS E0+

FETTEMP

	F
	E
	D
	C
	B
	A
	9
	8
	7
	6
	5
	4
	3
	2
	1
	0

BASE ADDRESS F0 +

DRIVERS

	F
	E
	D
	C
	B
DRIVER DAC 1C	A
DRIVER DAC 1B	9
DRIVER DAC 1A	8
	7
DRIVER DAC 0C	6
DRIVER DAC 0B	5
DRIVER DAC 0A	4
	3
	2
DRIVER CSR(1)	1
DRIVER CSR(0)	0

BASE ADDRESS 60+

MODULE INFORMATION

RESET		F		F
		E		E
		D		D
		C		C
		B		B
		A		A
		9		9
		8		8
		7		7
SPEC V6	SPEC V5	6		6
SPEC V4	SPEC V3	5		5
SPEC V2	SPEC V1	4		4
-15A	+15A	3		3
-15FE	+15FE	2		2
TEMP	+5V	1		1
MODULE TYPE	Serial #	0		0
BASE ADDRESS 00+			BASE ADDRESS XX+	