

Cavity Temperature and Phase Control

name	text	unit	typical	f.s.	off	f.s.	off	T
A/D channels								
Teav_CN	SECTION A TEMP	C	25	25	0	0	0	Temperature
62#:180	SECTION B TEMP	C	25	25	0	0	0	Pressure
	SECTION C TEMP	C	25	25	0	0	0	Phase
	SECTION D TEMP	C	25	25	0	0	0	Flow
	CLW SUP TEMP	C	15	25	0	0	0	Frequency
	MOD SUP TEMP	C	25	25	0	0	0	Chilled LCW
	PUMP SUC PRES	PSI	20	300	-0.1	0	0	STR Strainer
	PUMP DIS PRES	PSI	100	300	2.7	0	0	SEC Section
	MOD RET PRES	PSI	20	300	-0.5	0	0	M Module
	MOD STRN PRES	PSI	2	300	-0.1	0	0	MOD Module
	CLW SUP PRES	PSI	100	300	1.8	0	0	(mret-mstr)
	CLW STRN PRES	PSI	2	300	2.6	0	0	(csup-cstr)
	MODULE FLOW	GPM	200	600	0	0	0	
	CLW FLOW	GPM	5	75	0	0	0	

* adjust offset on all pressure channels to read same with water pumps off

computer channels

Pac_CN	T LP CLK CYCLE	15HZ	0	32768	0	32768	0	a=adjustable
62#:380	TEMP LP SET	C	27	25	25	25	25	c=loop on/off control
	MAX CLW FLOW	GPM	10	100	0	100	0	s=loop status
	FLW FEEDFORWD	GPM	5	50	0	50	0	x=adjustable with loop off
	TMP LP PROP GN	GAIN	6	100	0	100	0	
	WTR PUMP POWER	KW	7	100	0	100	0	
	FREQ LP SET	GPM	5	50	0	50	0	
	TMP LP INT OUT	GPM	0	50	0	50	0	
	TMP LP INT GN	GAIN	3	100	0	100	0	
	FLW LP INT GN	GAIN	0.1	10	0	10	0	
	TMP FEEDFORWD	C	0	10	0	10	0	
	TMP FEEDFORWD	GAIN	0	10	0	10	0	
	FLW FEEDFORWD	GAIN	0.7	10	0	10	0	
	PHS LP INT OUT	C	0	10	0	10	0	

14	TNOM	ac	NOM TMP ONOFF	C	27	50	0	50	0
15	PNOM	ac	NOM PHS ONOFF	DEG	0	100	0	100	0
16	PPHS	a	PHS LP PROP GN	GAIN	-0.05	10	0	10	0
17	IPHS	a	PHS LP INT GN	GAIN	+0.3	10	0	10	0

D/A channel

18	VSET	x	CLOW VALVE	VOLT	10	0	10	0	0
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Frequency Program / Power

A/D channels

LxMDET	MG DIODE DETECT V	5	0	5	0	0.418
LxWGPH	WAVGD TO CAV PH DEG	90	0	90	0	0.410

computer channels

LxRFPW	CAVITY FANBACK P VP2	53.28	0	0	0.0803	429 (nlc)
LxRFGV	CAVITY GRAD VOLT VPK	10	0	0	0	42A (nlc)
LxVCXO	VCXO					vco on/off control
KxWG1P	KLY PWR	MW				480/47f (nlc)
WxRFPW	KLY PK FWD PWR	MW	8	20	0	0.147 10f (nlc)

19	FERR	s	FRQ LP ER PHFRQ	KHZ	-30	53	0	53	0	uses norm and tol
20	FOFF	a	FRQ LP OFFSET	KHZ	370	1000	0	1000	0	
21	FPWR	a	FRQ LP PWR GN	GAIN	-1.1	100	0	100	0	
22	FTMP	a	FRQ LP TMP GN	GAIN	-13.4	100	0	100	0	
23	FTIM		FRQ LP ETIME	MS	16384		0	16384	0	
24	FINT	a	FRQ LP INT OUT	KHZ	0	100	0	100	0	
25	FLTC	a	FRQ LP TIM CON	15HZ	660	32768	0	32768	0	
26	IFRQ	a	FRQ LP INT GN	GAIN	1	10	0	10	0	
27	FRGM		FRQ LP PGM OUT	KHZ	-30	53	0	53	0	

D/A channel

28	VCO	x	VCO PGM ONOFF	KHZ	-30	53	0	53	0
30	FLIM		MIN MODULE FLW	C	50	500	0	500	0
31	TAVG		AVG MODULE TMP	C	27	50	0	50	0