ECET 491

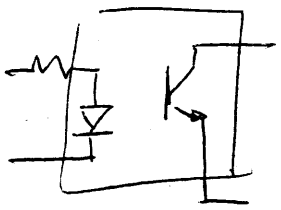
2012/9/6

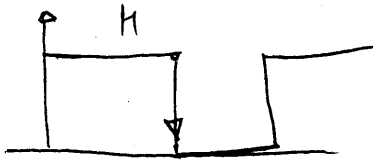
Barry's Project

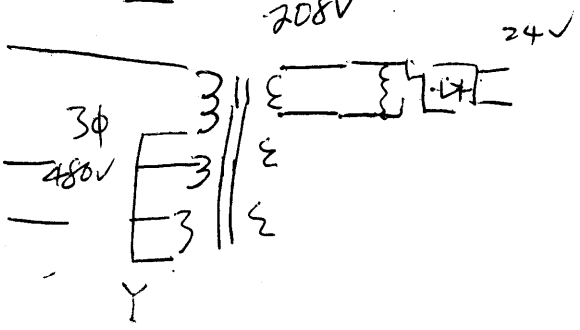
Data

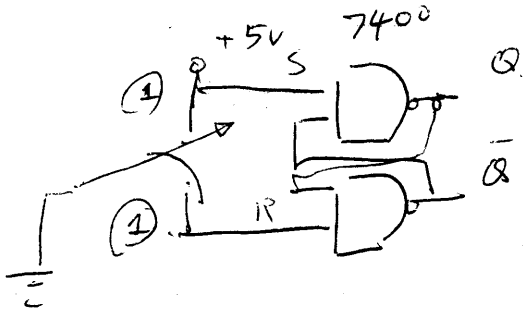
1. Power ON/OFF 24V

3φ480V / 24V









R	S	Q	$\bar{Q}$
0	0	No allowed	
0	1	1	0
1	0	0	1
1	1	No change	

Data Capturing

1. Power on/off (24V)
2. Cycle ON (Machine Running) (24V)
   PLC – Cycle Start
3. Feed hold

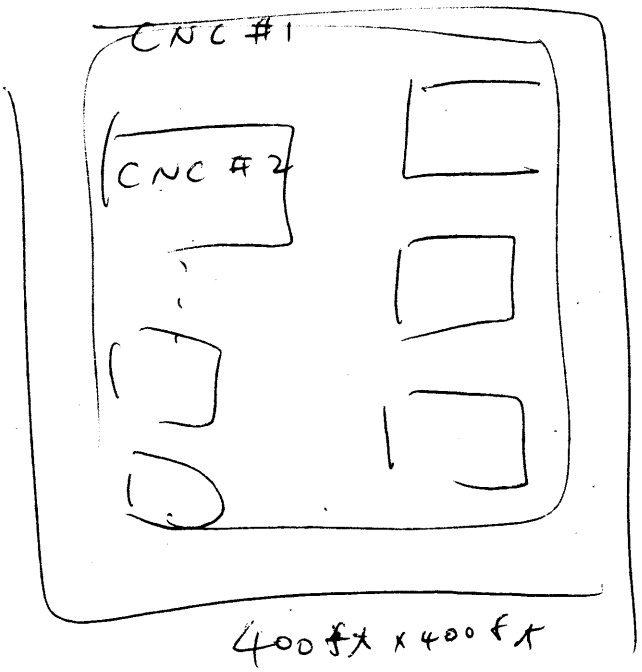
   Machine Paused (24V)
4. Alarm output (24V)
5. Another

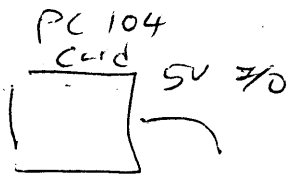
PC -
XP Processor

PC 104 — 5V

Card Stackable — 96 I/O points. Input/output

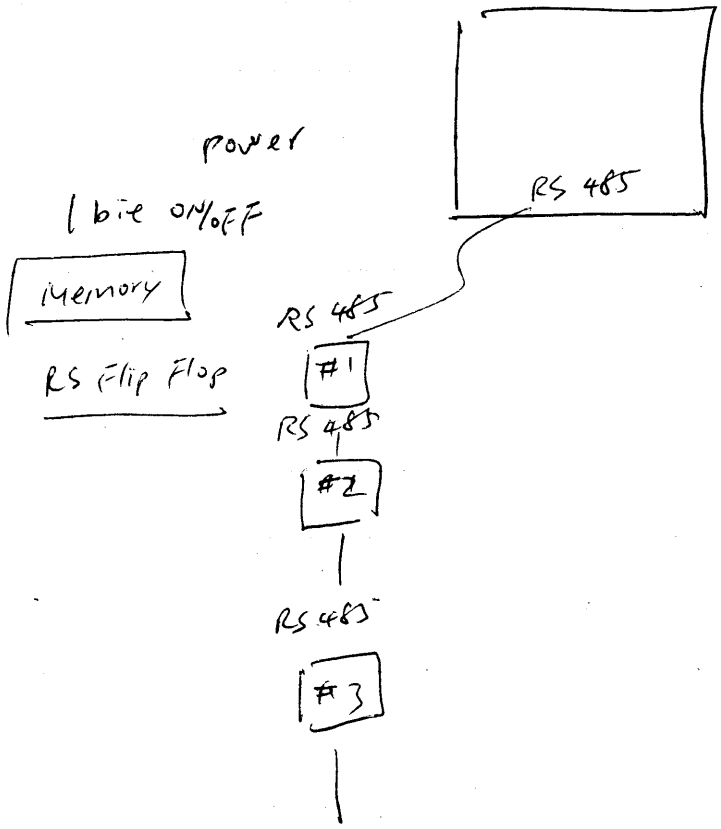
# of Machine 14 CNC



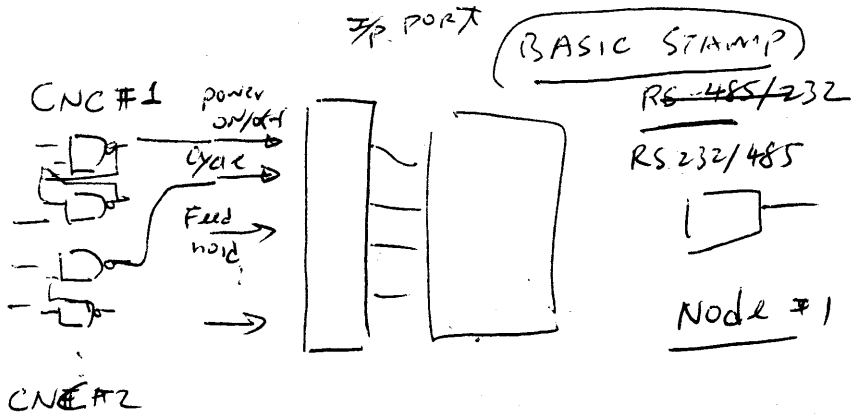


Ceiling

XP fanless process

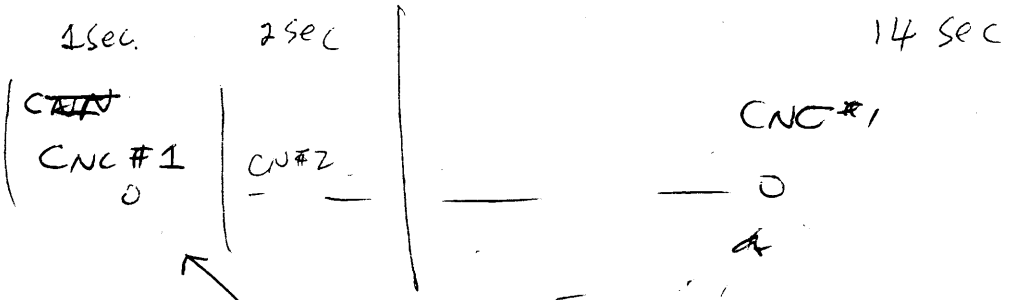


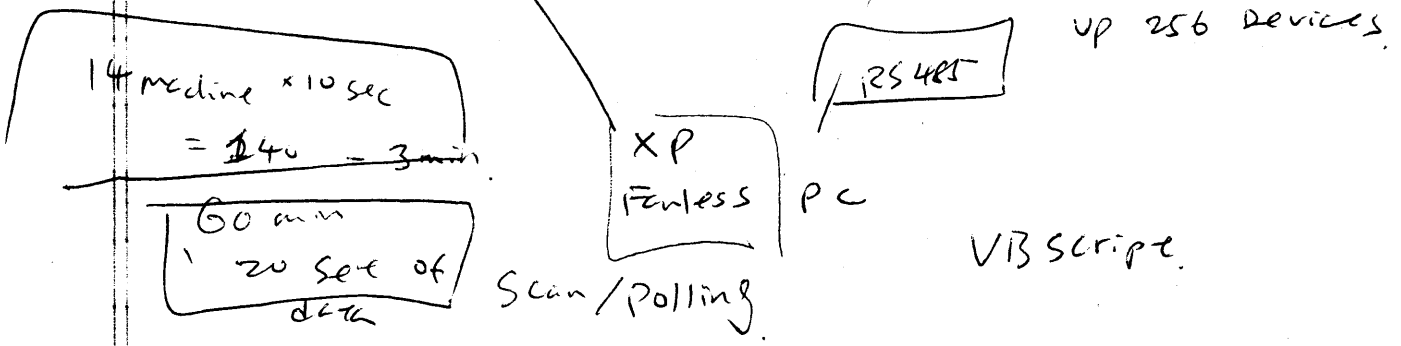
4-6 bit



Read one byte - Feed Cycle Power H ON/off

b_7	b_6	b_5	b_4	b_3	b_2	b_1	b_0
					0	0	0
					0	0	1





CNC #1	time Stamp	CNC #2	Time Stamp
Basic Stamp	ϕ	XP	12:05
	ϕ		12:45

40min

1 hr

Starting time

Data Reading every 10 Sec.

CNC#1

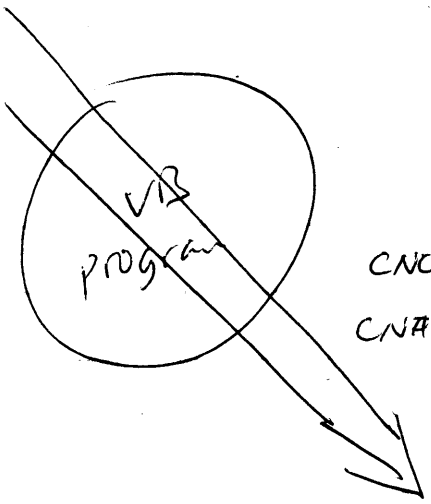
1 hr

Raw Data

Intelligent Data Analysis.

2h

3r

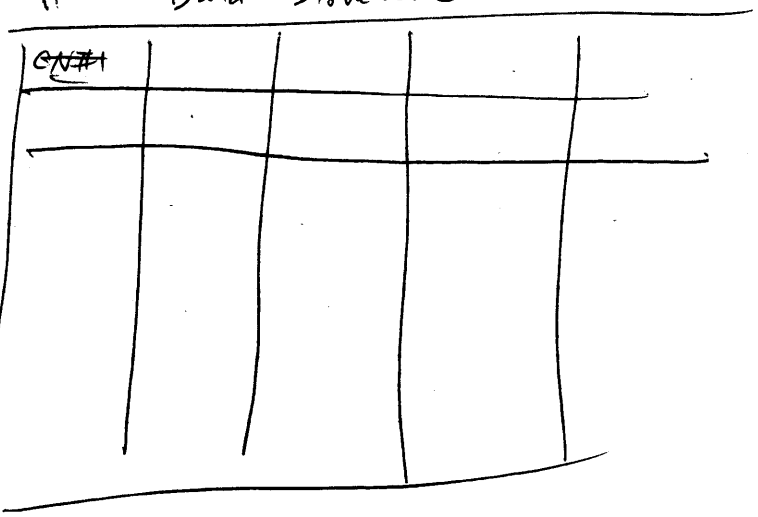


CNC#1

CNC#2

ON For How ~~Long~~

Cycle start for Data Structure



8 hr.

Decision tree

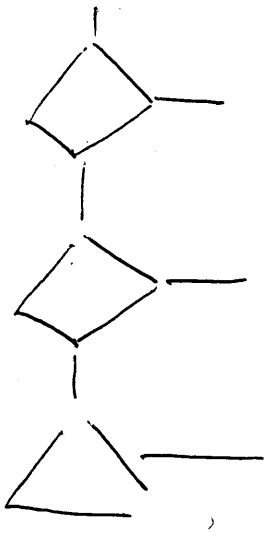
Algorithm

ON

4hr

Pause

10 sec



Wake it at 8 AM

Machine turn ON

Machine # 10 PM.