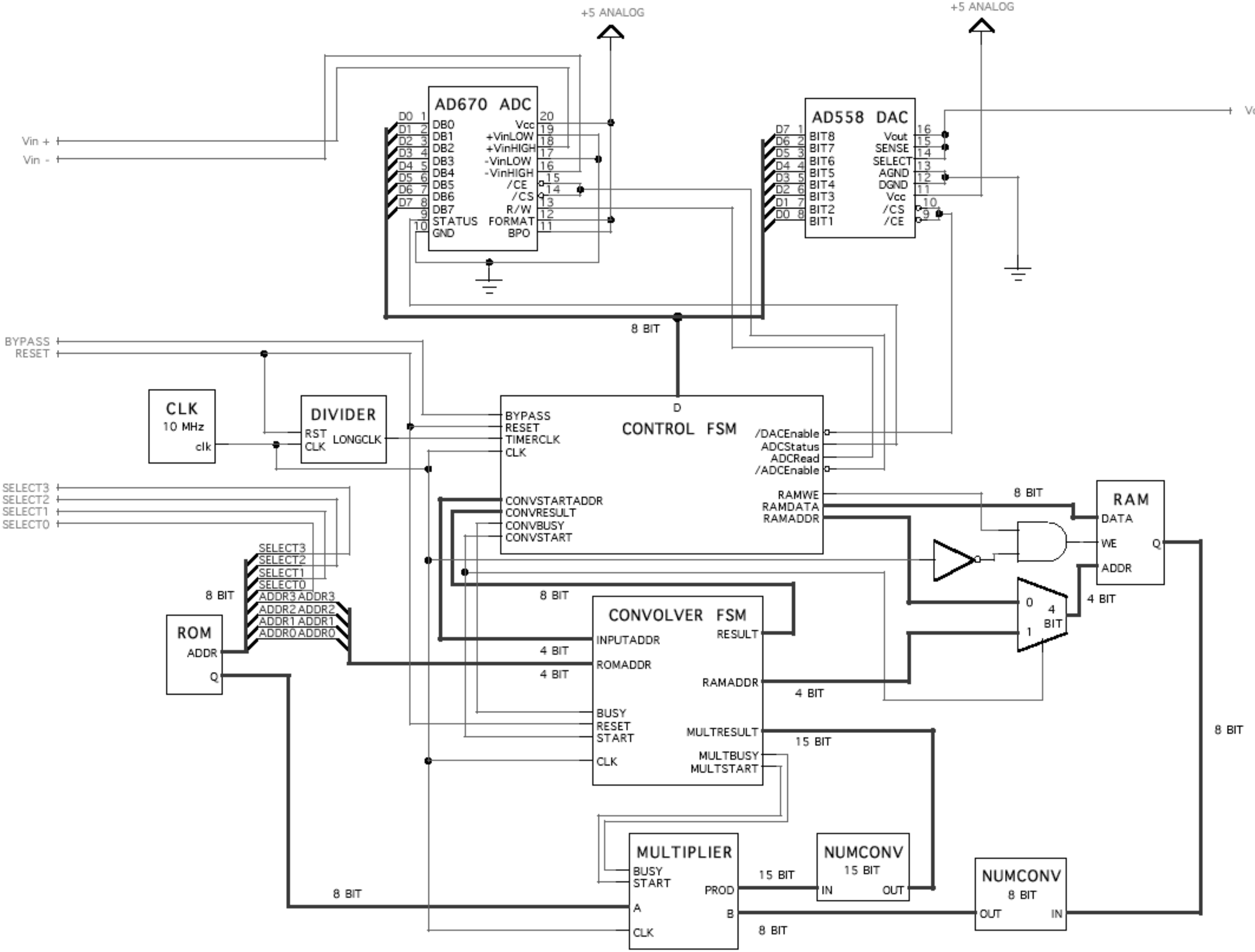
+5 ANALOG
+5 ANALOG
AD670 ADC
D0 1
D1 2
D2 3
D3 4
D4 5
D5 6
D6 7
D7 8
9
10
DB0
DB1
DB2
DB3
DB4
DB5
DB6
DB7
STATUS
GND
Vcc
+VinLOW
+VinHIGH
-VinLOW
-VinHIGH
/CE
/CS
R/W
FORMAT
BPO
20
19
18
17
16
15
14
13
12
11
Vin +
Vin -
AD558 DAC
D7 1
D6 2
D5 3
D4 4
D3 5
D2 6
D1 7
D0 8
BIT8
BIT7
BIT6
BIT5
BIT4
BIT3
BIT2
BIT1
Vout
SENSE
SELECT
AGND
DGND
Vcc
/CS
/CE
16
15
14
13
12
11
10
9
Vout
8 BIT
BYPASS
RESET
CLK
10 MHz
clk
DIVIDER
RST
CLK
LONGCLK
D
CONTROL FSM
BYPASS
RESET
TIMERCLK
CLK
/DACEnable
ADCStatus
ADCRead
/ADCEnable
RAMWE
RAMDATA
RAMADDR
CONVSTARTADDR
CONVRESULT
CONVBUSY
CONVSTART
SELECT3
SELECT2
SELECT1
SELECT0
8 BIT
RAM
DATA
WE
ADDR
Q
4 BIT
0
1
4
BIT
8 BIT
ROM
ADDR
Q
SELECT3
SELECT2
SELECT1
SELECT0
ADDR3 ADDR3
ADDR2 ADDR2
ADDR1 ADDR1
ADDR0 ADDR0
8 BIT
CONVOLVER FSM
INPUTADDR
ROMADDR
RESULT
RAMADDR
BUSY
RESET
START
CLK
MULTRESULT
MULTBUSY
MULTSTART
4 BIT
4 BIT
4 BIT
15 BIT
8 BIT
MULTIPLIER
BUSY
START
A
CLK
PROD
B
15 BIT
8 BIT
NUMCONV
15 BIT
IN
OUT
NUMCONV
8 BIT
OUT
IN
8 BIT