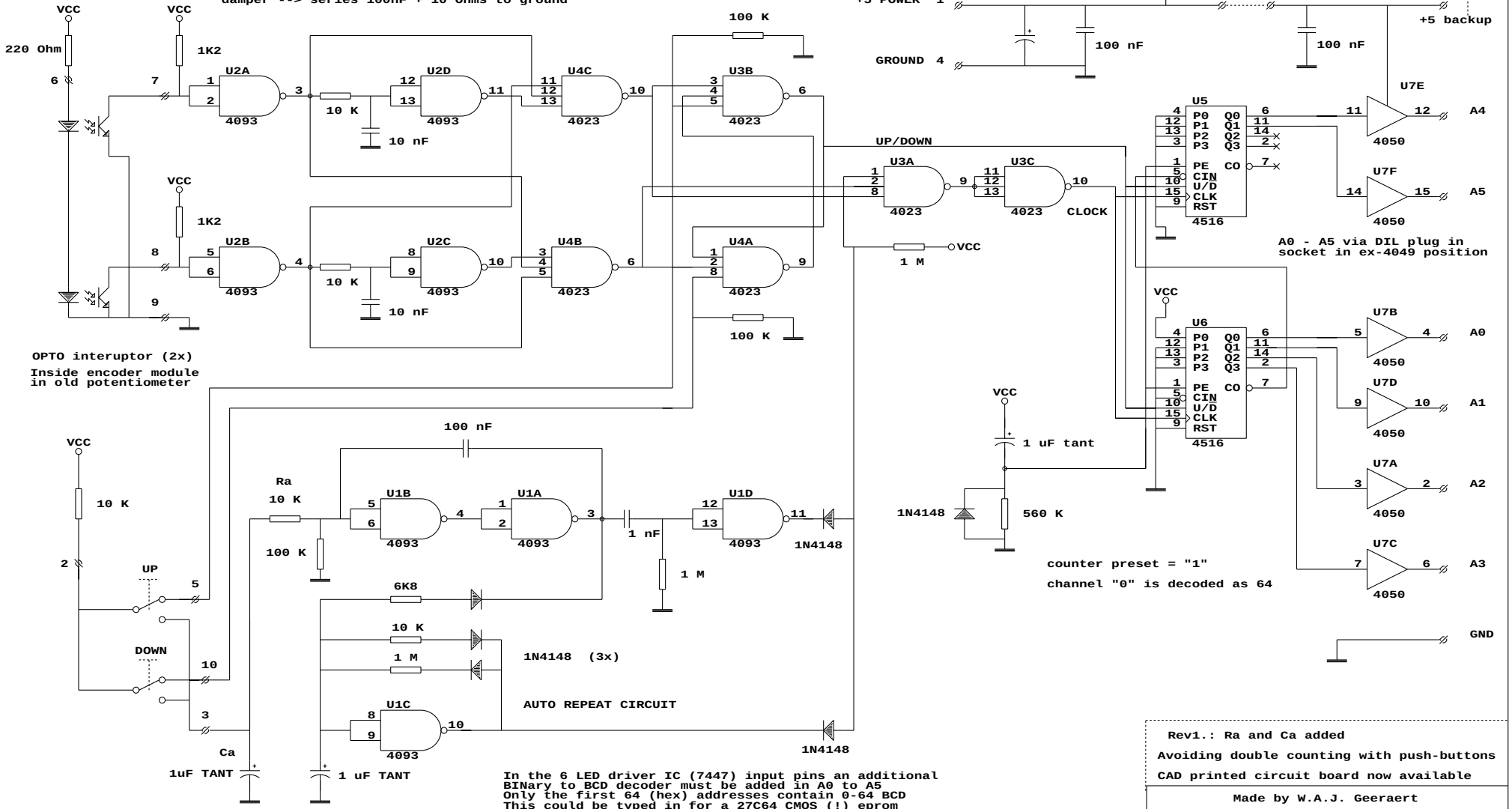
The opto encoder (self-build) is in place of the original 24 channel switch
Also a BOURNS puls encoder device could be used (with contact damping networks!!!!)
(BOURNS code: ECW1J-B24-AC0024)

For BOURNS:
1K2 pull-up --> 4K7
damper --> series 100nF + 10 Ohms to ground



PICO SWITCHES
ON FRONT PANEL

PLACED ABOVE THE 4 ORIGINAL BANKSWITCHES (NDH-518)

In the 6 LED driver IC (7447) input pins an additional
BINary to BCD decoder must be added in A0 to A5
Only the first 64 (hex) addresses contain 0-64 BCD
This could be typed in for a 27C64 CMOS (!) eprom
With minimise software this could also be placed in a GAL22V10
See other upgrade drawings for a circuit example and pinnings
For 64 channel banks a GAL16V8 has not enough array depth
But a 16V8 or 20V8 will work with 8 banks of 32 channels

Rev1.: Ra and Ca added
Avoiding double counting with push-buttons
CAD printed circuit board now available

Made by W.A.J. Geeraert

Title: NDH-518 MEMORY ADRESSING CONTROLLER		
Size: B	Document Number: TOTAL 4X64 = 256 CHANNEL UPGRADE!!	REV: 3
Date: December 24, 1999	Sheet 1 of 1	