Schematics of the water leak detector for DIRC
The Ohm-meter card
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LM339N: Low power low offset voltage quad comparator
REPLACED with TLC339I, micropower quad comparator
DM7404: Hex inverter gates (16mA LLOC, -0.4 mA HLOC)
DM74S140: Dual 4-input NAND 50 Ohm line driver (60mA low level output current; -3 mA high level OC)
1N914: High conductance fast diode
D2,3,4,6,7,8: Lumex PCB Mount LEDs
D2, D6: SSF-LXH100GD, 565nm, 2.1V, 10-25mA, 8mCd
D3, D7: SSF-LXH100SRD, 660nm, 1.7V, 10-25mA, 40mCd
D4, D8: SSF-LXH100YD, 585nm, 2.1V, 10-25mA, 8mCd
Resistors: all <500k Ð 1% 1/8W metal film; others Ð 1%/4W metal film, 5.1M, 8.2M Ð 5% carbon film 1/4W
Capacitors: Cap-ceramic disk, 50V
Fuses: 100 mA slow fuses, 20mm, Littelfuse

+5V to 20-input OR on the auxiliary card (card #11)

Description of test points (TP)
TP1: normally 1.80V. Gets compared to TP2 (water leak alarm) and TP7 (broken cable). Should never be below –0.3V, so we have a clamp diode (D1)
TP2: 2.62V if TP3 is high, 2.38V if low
TP3: 5.0V high (normal), 0.1V low (water!!!)
TP4: 3.4V high (water!!!), 0.2V low (normal)
TP5: 3.4V high (water!!!), 0.2V low (normal)
TP6: 3.4V high (normal), 0.2V low (water!!!)
TP7: 0.88V if TP8 is high, 0.81V if low
TP8: 5.0V high (broken cable), 0.1V low
TP9: 3.4V high (normal), 0.2V low (cable!)
TP10-19: same as TP1-9

Attention: all 162k, 681k, 825k, 5.1M resistors must be tested to insure right voltage levels.