iC-ML EVAL ML1D
EVALUATION BOARD DESCRIPTION

ORDERING INFORMATION

Type	Order Designation	Description/Options
iC-ML Evaluation Board	ML1D EVAL	Evaluation board for iC-ML with magnetic scale

BOARD ML1D

(size 100 mm x 80 mm)

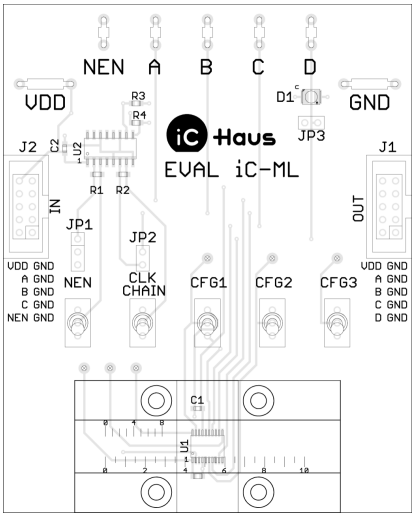

Figure 1: Component side of ML1D board

TERMINAL DESCRIPTIONS

Name	Function
VDD	Supply Voltage
NEN	Not Enable
A	Port A
B	Port B
C	Port C
D	Port D
GND	Ground
CFG1	Configuration Input 1
CFG2	Configuration Input 2
CFG3	Configuration Input 3

DESCRIPTION

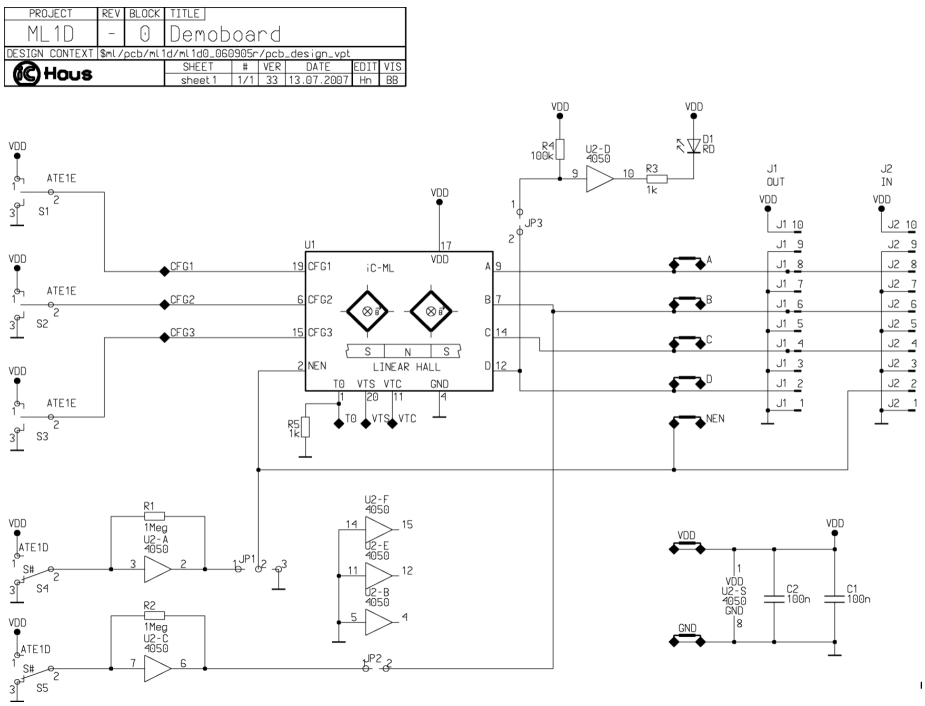

Figure 2: Schematic diagram of ML1D board

ASSEMBLY PART LIST

Device	Value (typ)	Comment
C1	100 nF	blocking capacitor
C2	100 nF	blocking capacitor
D1	SMD-LED	indicator lamp for Port D output of iC-ML
R1	1 MΩ	feedback resistor
R2	1 MΩ	feedback resistor
R3	1 K	current limiting resistor
R4	100 kΩ	pull-up resistor
R5	1 K	pulldown resistor
U1	CD 4050	hex CMOS inverter, for debouncing switches S4 and S5 and driving indicator lamp D1
U2	iC-ML	hall sensor/encoder
J1	10 pin	output connector for cascading multiple demo boards
J2	10 pin	input connector for cascading multiple demo boards
JP1	jumper	connects S4 with NEN input; remove this jumper in chain modes when this board is not the first in a chain
JP2	jumper	connects S5 with CLK input in chain modes; used only in one board of a chain, remove on the rest
JP3	jumper	connects PORT D to indicator; remove this jumper to check tristate condition
S1	key switch	CFG1 level (high, open, low)
S2	key switch	CFG2 level (high, open, low)
S3	key switch	CFG3 level (high, open, low)
S4	key switch	NEN level (high, low)
S5	key switch	CLK level (high, low) (Port B of iC-MA when used in chain operation mode; otherwise remove jumper JP2)