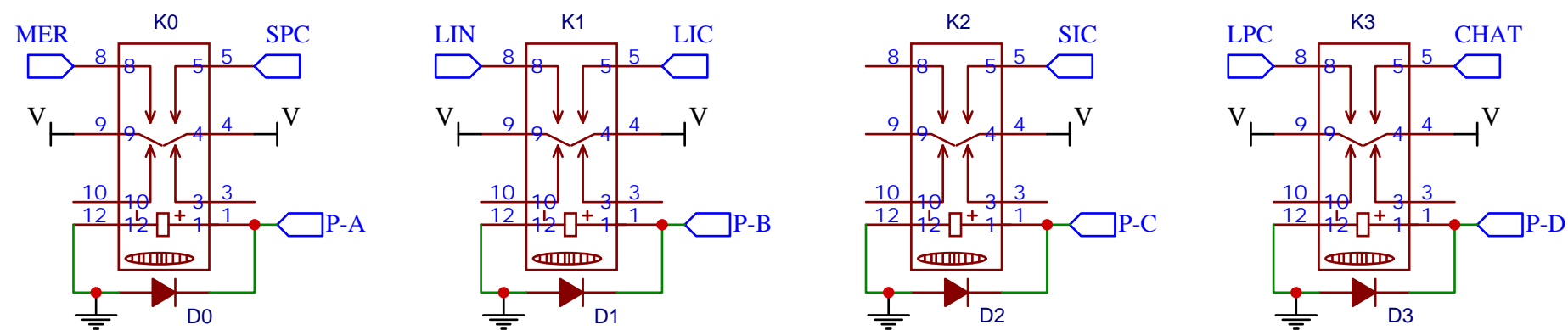
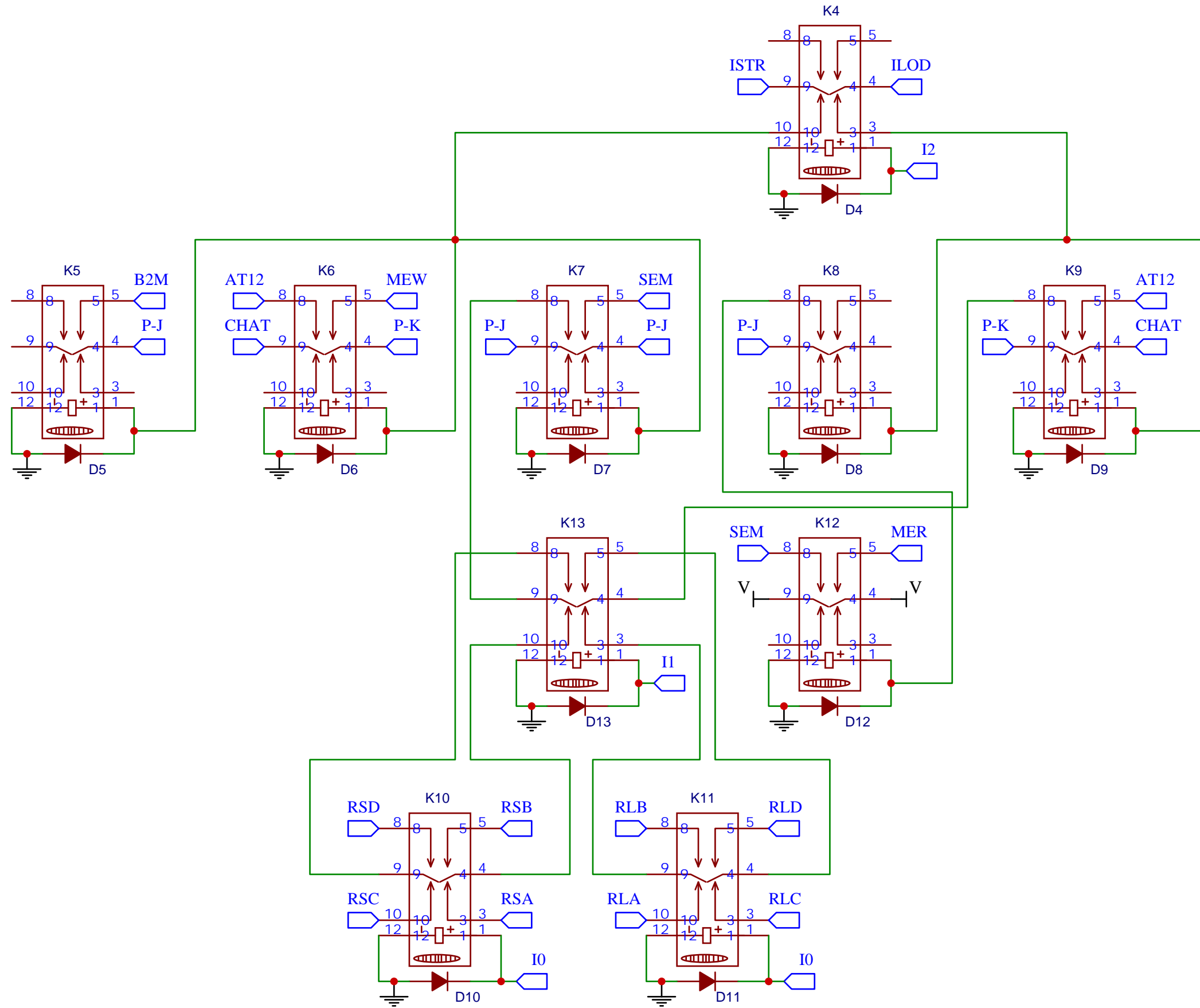


Sheet 1: Instruction Fetch & Increment



P-* signals connect from Pulse Bus (Sheet 5)
 Other signals connect to CtrlX/Y/Z via lower card (Sheet 5)

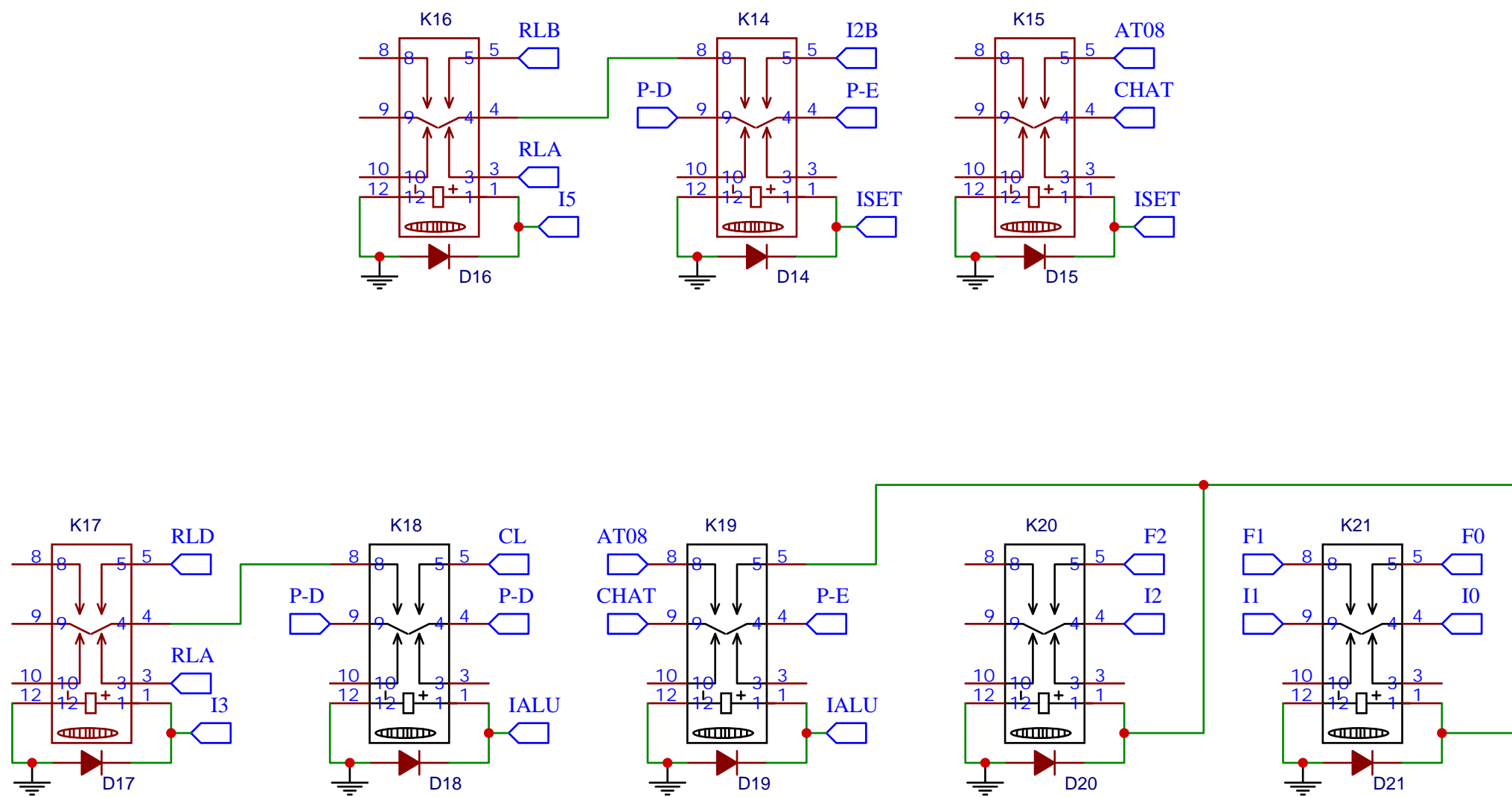
TITLE: Relay Computer : Controller Upper Card		REV: 1.0
	Company: Paul Law	Sheet: 1/6
	Date: 2019-11-02 Drawn By: paul_6392	



LOAD: 100100rr
 rr = dest reg (A,B,C,D)
 STORE: 100110rr
 rr = src reg (A,B,C,D)

P-* signals connect from Pulse Bus (Sheet 5)
 I0-17 signals connect from C/I Bus (Sheet 5)
 CHAT signal connects from Fetch/Increment group (Sheet 1)
 AT08/10/12/14 and ISTR/ILOD signals connect to OP Bus (Sheet 5)
 Other signals connect to CtrIX/Y/Z via lower card (Sheet 5)

TITLE: Relay Computer: Controller Upper Card		REV: 1.0
EasyEDA	Company: Paul Law	Sheet: 2/6
	Date: 2019-11-02	Drawn By: paul_6392

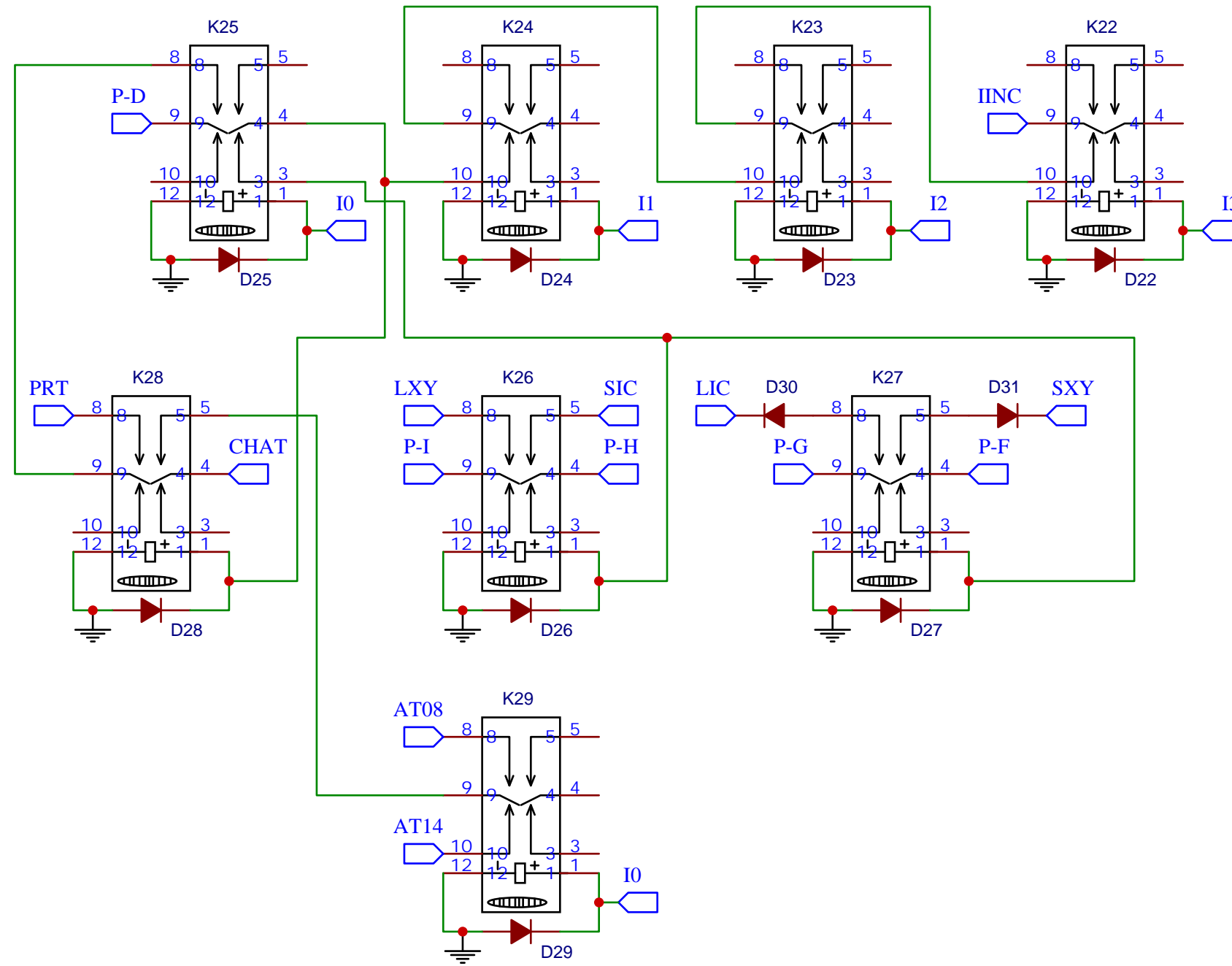


ALU: 1000rfff
 r = dest reg (A or D)
 fff = function code

SETAB: 01rddddd
 r = dest reg (A or B)
 ddddd = value

P-* signals connect from Pulse Bus (Sheet 5)
 I0-17 signals connect from C/I Bus (Sheet 5)
 CHAT signal connects from Fetch/Increment group (Sheet 1)
 AT08/10/12/14 and ISET/IALU signals connect to OP Bus (Sheet 5)
 Other signals connect to CtrIX/Y/Z via lower card (Sheet 5)

TITLE: Relay Computer : Controller Upper Card		REV: 1.0
EasyEDA	Company: Paul Law	Sheet: 3/6
	Date: 2019-09-23	Drawn By: paul_6392

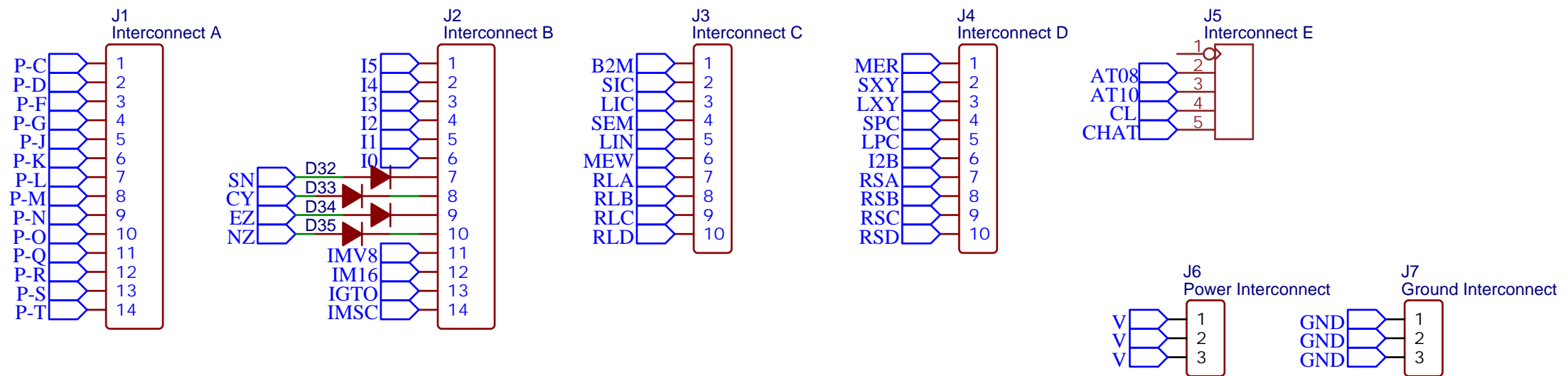
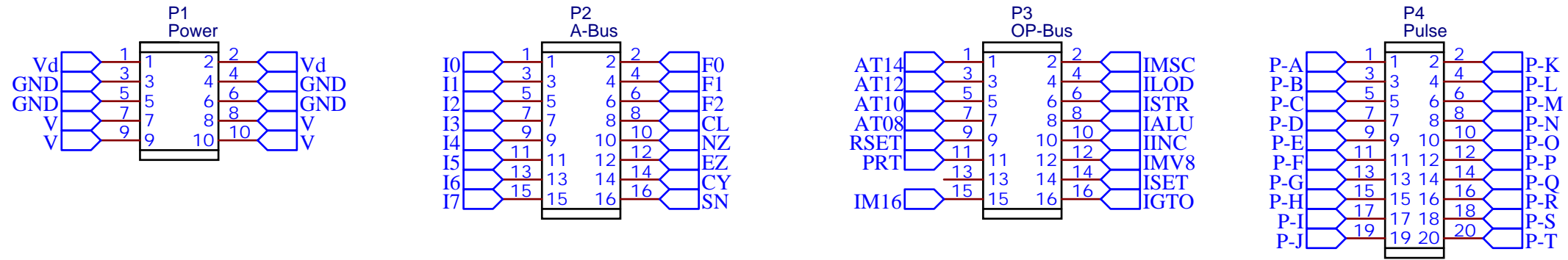


INCXY: 10110000
 PRINT: 10110001

P-* signals connect from Pulse Bus (Sheet 5)
 I0-17 signals connect from C/I Bus (Sheet 5)
 CHAT signal connects from Fetch/Increment group (Sheet 1)
 AT08/10/12/14 and IINC signals connect to OP Bus (Sheet 5)
 Other signals connect to CtrX/Y/Z via lower card (Sheet 5)

TITLE: Relay Computer: Upper Control Card		REV: 1.0
EasyEDA	Company: Paul Law	Sheet: 4/6
	Date: 2019-11-02	Drawn By: paul_6392

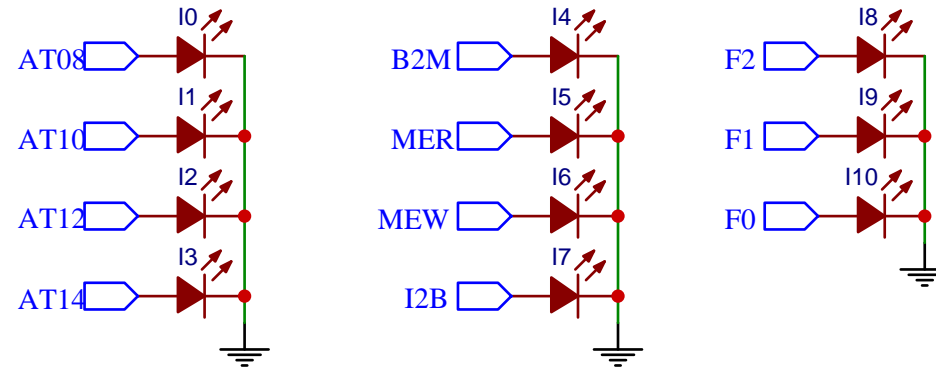
Sheet 5: Backplane & Inter-card connections



Interconnects pass signals to/from lower card
P1-P4 connect to W1 backplane connectors

TITLE: Relay Computer : Controller Upper Card		REV: 1.0
	Company: Paul Law	Sheet: 5/6
	Date: 2019-11-02	Drawn By: paul_6392

Sheet 6: Card Status LEDs



TITLE: Relay Computer : Controller Upper Card		REV: 1.0
EasyEDA	Company: Paul Law	Sheet: 6/6
	Date: 2019-11-02	Drawn By: paul_6392