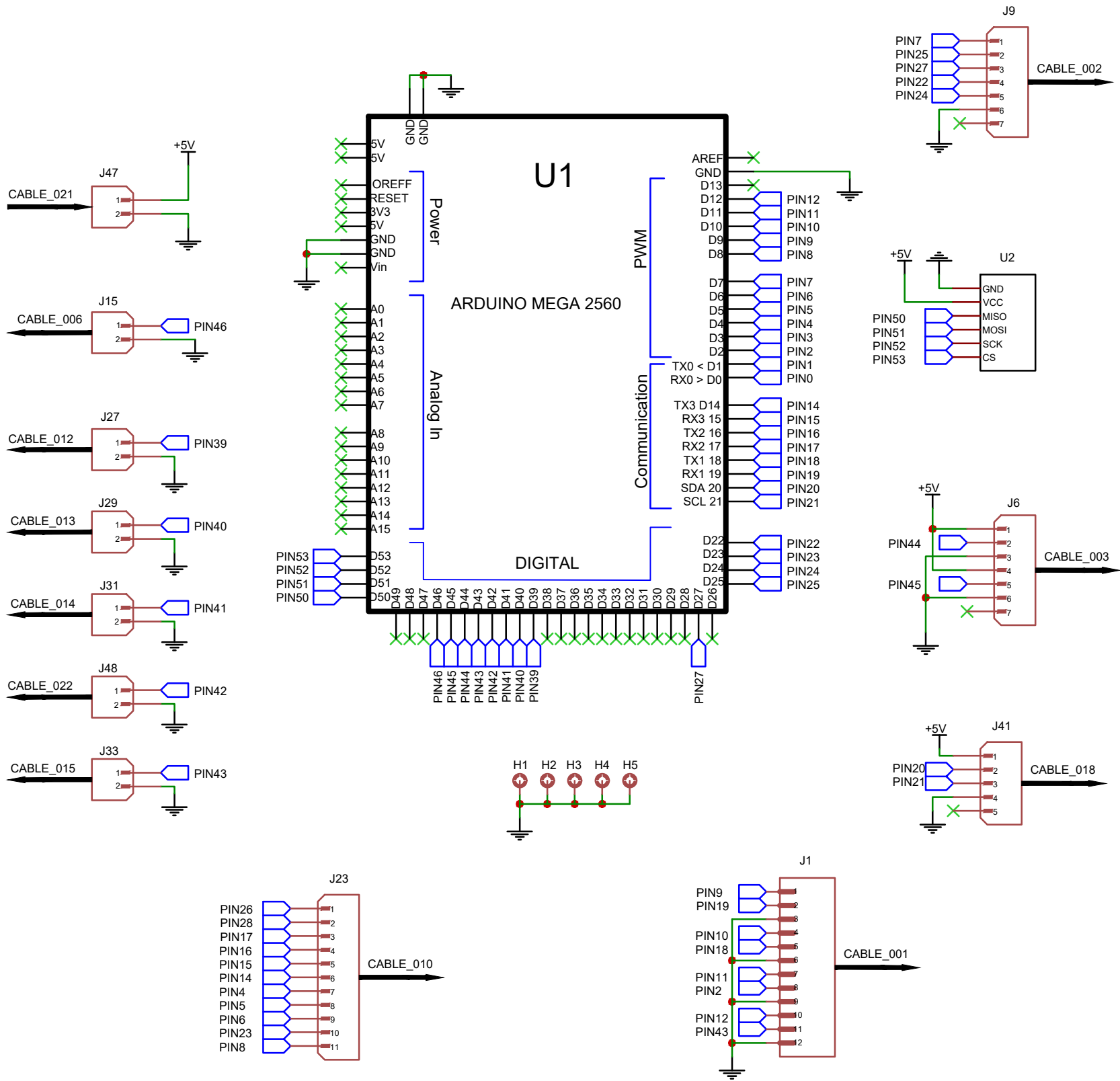


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 4 PRELIMINARY RELEASE	2/8/22	SM
01	GATE 5 PCB UPDATE	3/14/22	JC

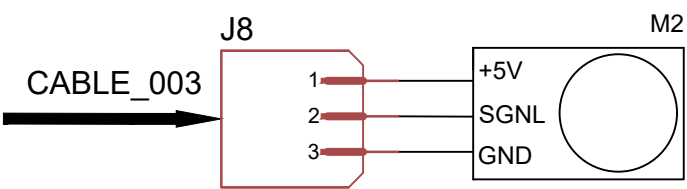
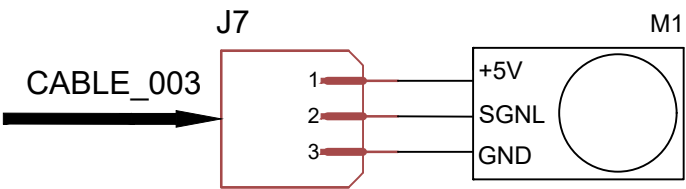
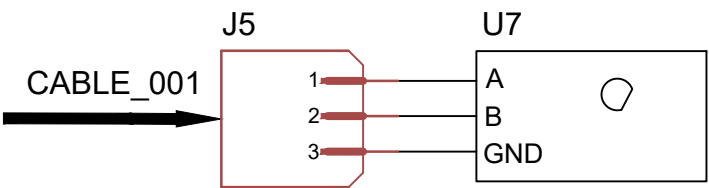
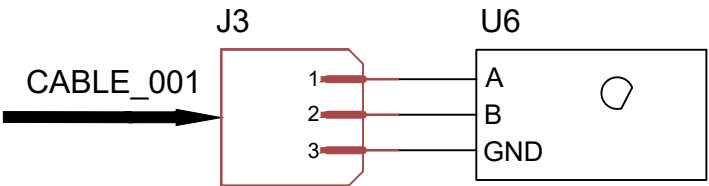
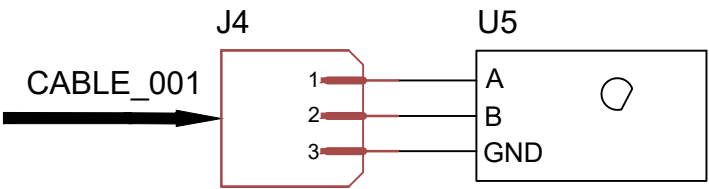
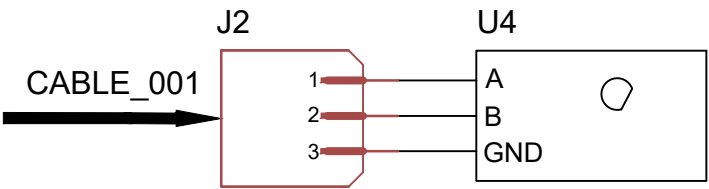


DWG 1100 BILL OF MATERIALS (BOM)		
IDENTIFIER	DESCRIPTION	PART #
U1	ARDUINO MEGA 2560 ATMEGA2560	A000067
U2	MICRO-SD CARD MODULE FOR ARDUINO	DFR0229
J1	CONN HEADER VERT 12POS 2.5MM	533751210
J23	CONN HEADER VERT 11POS 2.5MM	533751110
J6	CONN HEADER VERT 7POS 2.5MM	533750710
J9	CONN HEADER VERT 7POS 2.5MM	533750710
J41	CONN HEADER VERT 5POS 2.5MM	533750510
J15	CONN HEADER VERT 2POS 2.5MM	533750210
J47	CONN HEADER VERT 2POS 2.5MM	533750210
J27	CONN HEADER VERT 2POS 2.5MM	533750210
J29	CONN HEADER VERT 2POS 2.5MM	533750210
J31	CONN HEADER VERT 2POS 2.5MM	533750210
J48	CONN HEADER VERT 2POS 2.5MM	533750210
J33	CONN HEADER VERT 2POS 2.5MM	533750210
H1	HEX STANDOFF THREADED M2.5	971050154
H2	HEX STANDOFF THREADED M2.6	971050154
H3	HEX STANDOFF THREADED M2.7	971050154
H4	HEX STANDOFF THREADED M2.8	971050154
U3	CUSTOM JLC PCB	JLC01
CABLE_001	REFERENCE DRAWING 1120	
CABLE_002	REFERENCE DRAWING 1120	
CABLE_003	REFERENCE DRAWING 1120	
CABLE_006	REFERENCE DRAWING 1121	
CABLE_010	REFERENCE DRAWING 1121	
CABLE_012	REFERENCE DRAWING 1121	
CABLE_013	REFERENCE DRAWING 1122	
CABLE_014	REFERENCE DRAWING 1122	
CABLE_015	REFERENCE DRAWING 1122	
CABLE_018	REFERENCE DRAWING 1122	
CABLE_021	REFERENCE DRAWING 1123	
CABLE_022	REFERENCE DRAWING 1123	

PREPARED	E. EICKHOLTZ	2021/02/24	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	J. COUCH	2021/03/14	TITLE ARDUINO SHIELD ON-BOARD SCHEMATIC	
ENGINEER			FILENAME 1100.DWG	DWG NO 1100

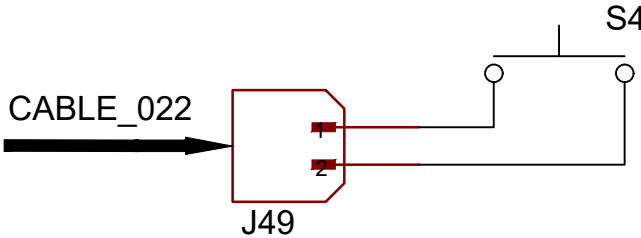
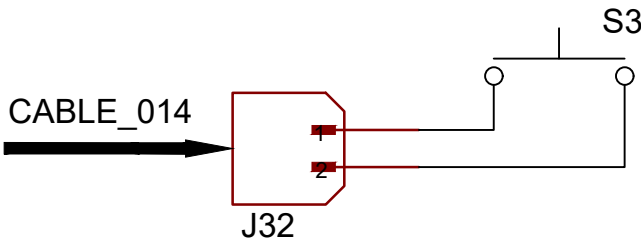
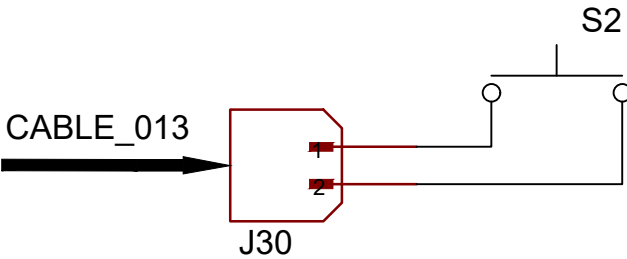
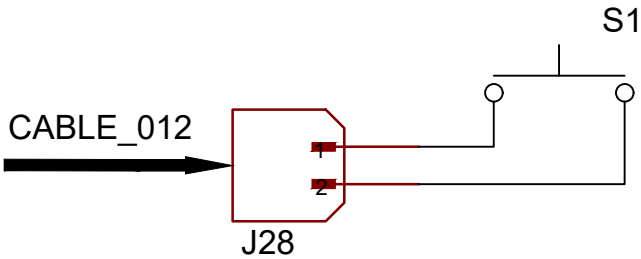


1110			
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 5 ARDUINO ENDPOINTS	03/13/22	SDM
01	UPDATED BOM FOR MATERIALS	03/14/22	SDM

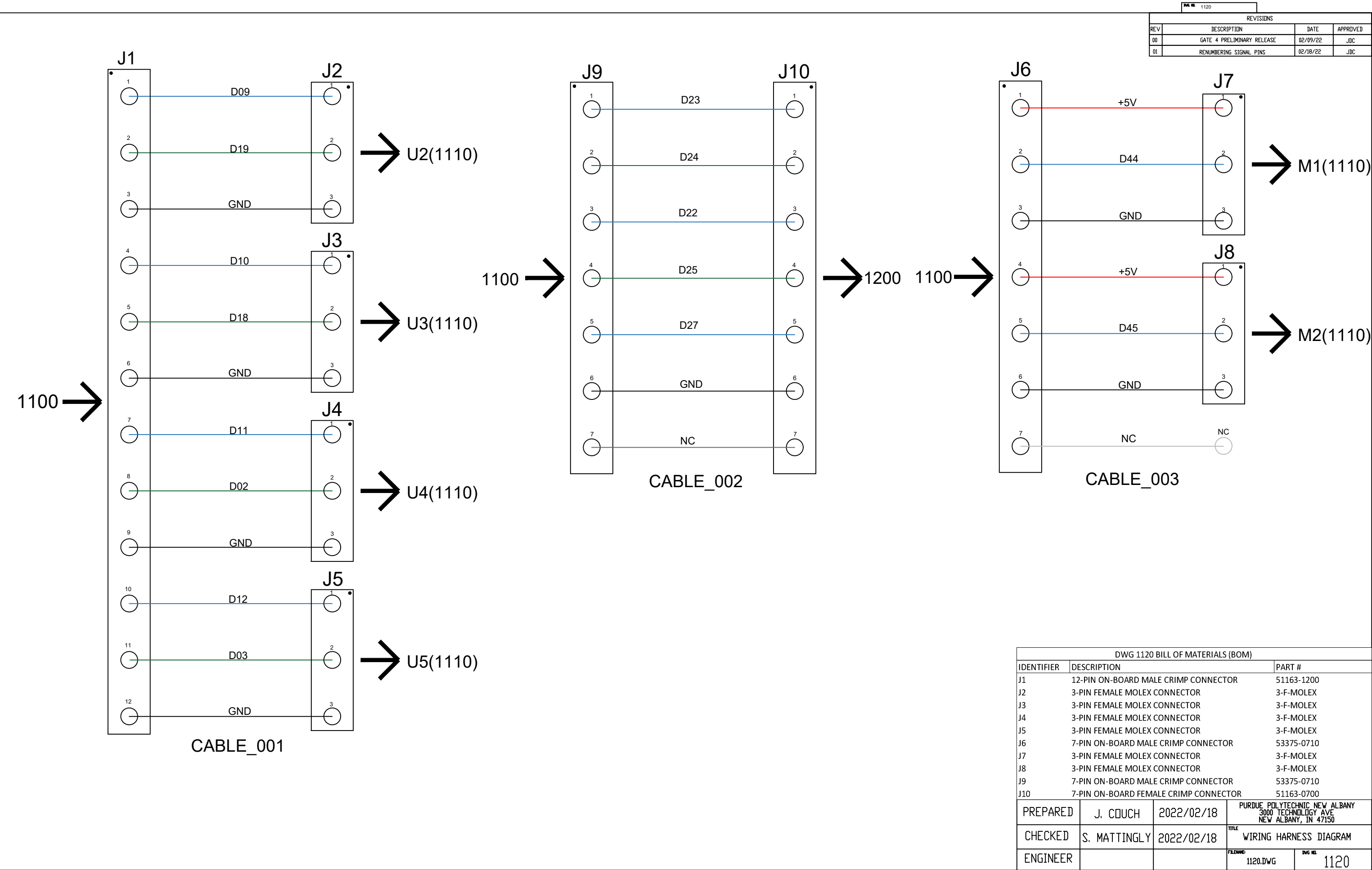


DWG 1110 BILL OF MATERIALS (BOM)				
IDENTIFIER	DESCRIPTION		PART #	
M1	ADAFRUIT SERVO MOTOR		154	
M2	ADAFRUIT SERVO MOTOR		154	
U4	CTS ELECTRONICS ROTARY ENCODER		288T232R161A1	
U5	CTS ELECTRONICS ROTARY ENCODER		288T232R161A1	
U6	CTS ELECTRONICS ROTARY ENCODER		288T232R161A1	
U7	CTS ELECTRONICS ROTARY ENCODER		288T232R161A1	
J2	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
J3	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
J4	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
J5	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
J7	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
J8	3-PIN MALE MOLEX CONNECTOR		3-M-MOLEX	
CABLE_001	REFERENCE DRAWING 1120			
CABLE_003	REFERENCE DRAWING 1120			
PREPARED	S. MATTINGLY	2022/03/13	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	J. COUCH	2022/03/15	TITLE ARDUINO MEGA 2560 OFF-BOARD COMPONENTS	
ENGINEER			FILENAME: 1110.ARDUINO	DWG NO. 1110

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 5 ARDUINO ENDPOINTS	03/13/22	SDM
01	UPDATED BOM FOR MATERIALS	03/14/22	SDM



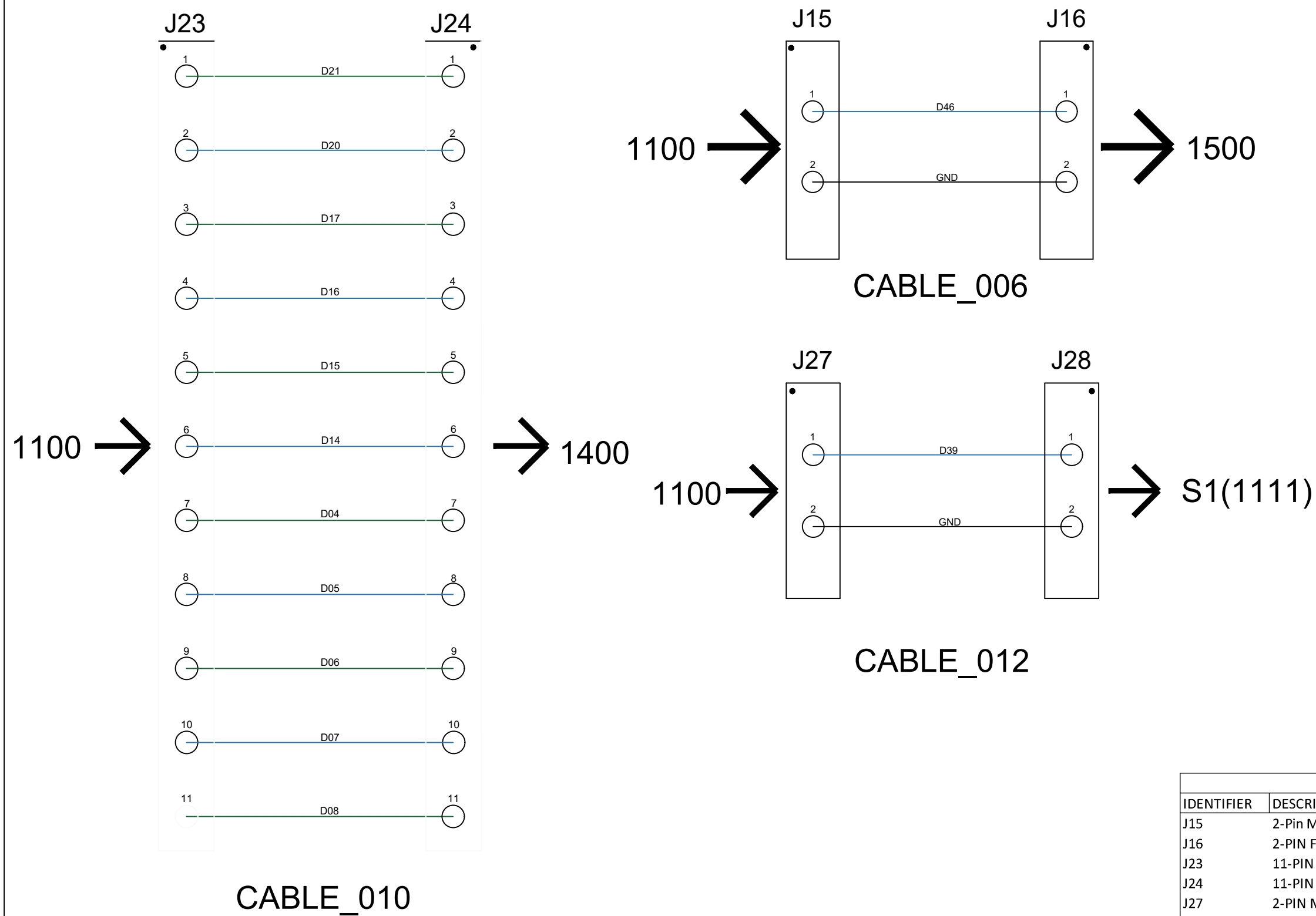
DWG 1111 BILL OF MATERIALS (BOM)				
IDENTIFIER	DESCRIPTION		PART #	
J28	2-PIN MALE MOLEX CONNECTOR		2-M-MOLEX	
J30	2-PIN MALE MOLEX CONNECTOR		2-M-MOLEX	
J32	2-PIN MALE MOLEX CONNECTOR		2-M-MOLEX	
J49	2-PIN MALE MOLEX CONNECTOR		2-M-MOLEX	
S1	NO-PUSH BUTTON		PB-001	
S2	NO-PUSH BUTTON		PB-002	
S3	NO-PUSH BUTTON		PB-003	
S4	NO-PUSH BUTTON		PB-004	
CABLE_012	REFERENCE DRAWING 1121			
CABLE_013	REFERENCE DRAWING 1122			
CABLE_014	REFERENCE DRAWING 1122			
CABLE_022	REFERENCE DRAWING 1123			
PREPARED	S. MATTINGLY	2022/03/13	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	J. COUCH	2022/03/15	TITLE ARDUINO MEGA 2560 OFF-BOARD COMPONENTS	
ENGINEER			FILENAME: 1111.ARDUINO	DWG NO. 1111



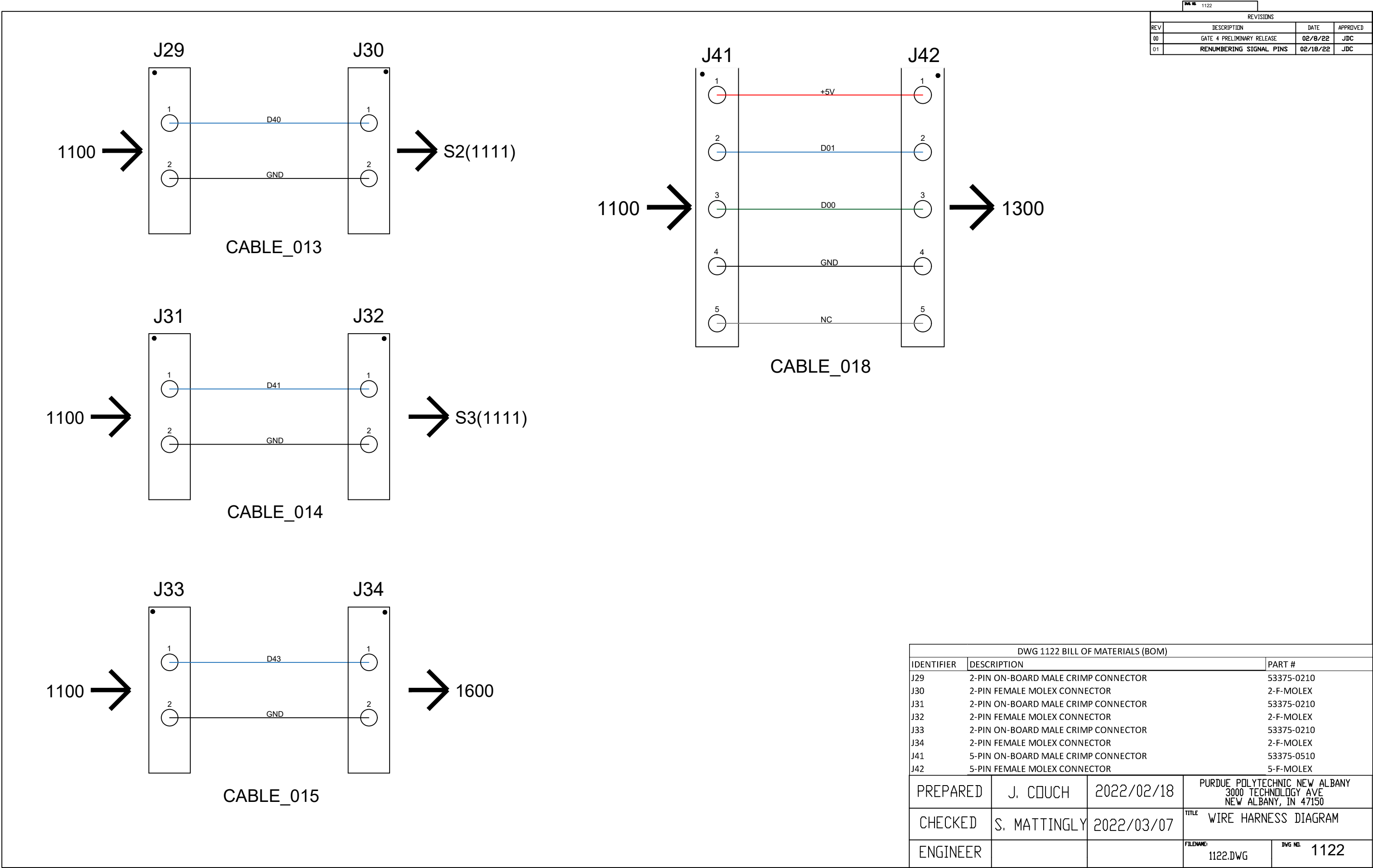
DWG 1120 BILL OF MATERIALS (BOM)			
IDENTIFIER	DESCRIPTION	PART #	
J1	12-PIN ON-BOARD MALE CRIMP CONNECTOR	51163-1200	
J2	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J3	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J4	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J5	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J6	7-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0710	
J7	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J8	3-PIN FEMALE MOLEX CONNECTOR	3-F-MOLEX	
J9	7-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0710	
J10	7-PIN ON-BOARD FEMALE CRIMP CONNECTOR	51163-0700	

PREPARED	J. COUCH	2022/02/18	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	S. MATTINGLY	2022/02/18	TITLE WIRING HARNESS DIAGRAM	
ENGINEER			FILENAME 1120.DWG	DWG NO. 1120

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 4 PRELIMINARY RELEASE	02/8/22	JDC
01	RENUMBERING SIGNAL PINS	02/18/22	JDC



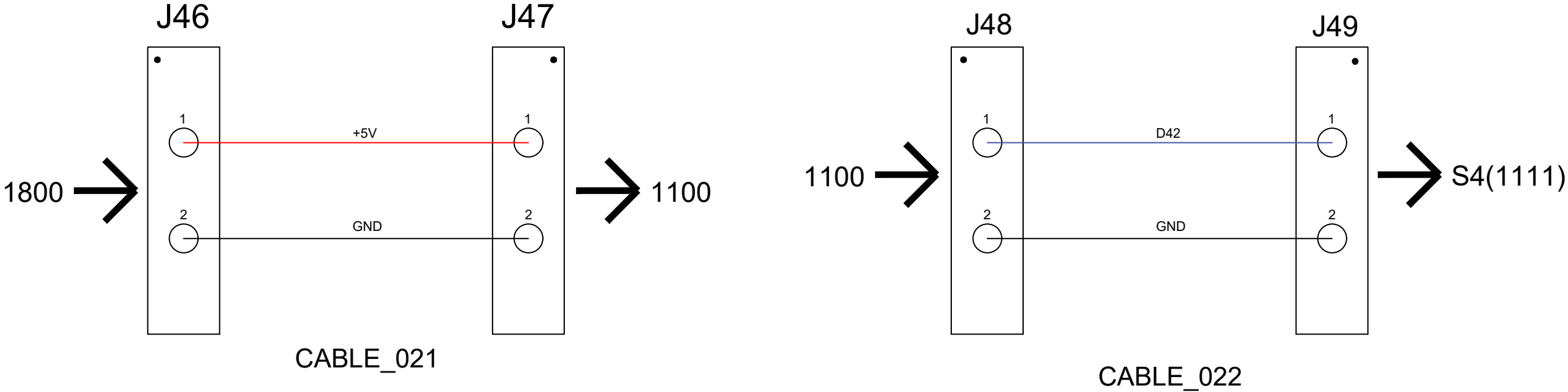
DWG 1121 BILL OF MATERIALS (BOM)				
IDENTIFIER	DESCRIPTION		PART #	
J15	2-Pin MALE MOLEX MINI-LOCK CONNECTOR		53375-0210	
J16	2-PIN FEMALE MOLEX CONNECTOR		2-F-MOLEX	
J23	11-PIN MALE MOLEX MINI-LOCK CONNECTOR		53375-1210	
J24	11-PIN FEMALE MOLEX CONNECTOR		11-F-MOLEX	
J27	2-PIN MALE MOLEX MINI-LOCK CONNECTOR		53375-0210	
J28	2-PIN FEMALE MOLEX CONNECTOR		2-F-MOLEX	
PREPARED	J. COUCH	2022/02/18	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	A. BOEHM	2022/03/14	TITLE WIRE HARNESS DIAGRAM	
ENGINEER			FILENAME: 1121.DWG	DWG NO. 1121



REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 4 PRELIMINARY RELEASE	02/8/22	JDC
01	RENUMBERING SIGNAL PINS	02/18/22	JDC

DWG 1122 BILL OF MATERIALS (BOM)			
IDENTIFIER	DESCRIPTION	PART #	
J29	2-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0210	
J30	2-PIN FEMALE MOLEX CONNECTOR	2-F-MOLEX	
J31	2-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0210	
J32	2-PIN FEMALE MOLEX CONNECTOR	2-F-MOLEX	
J33	2-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0210	
J34	2-PIN FEMALE MOLEX CONNECTOR	2-F-MOLEX	
J41	5-PIN ON-BOARD MALE CRIMP CONNECTOR	53375-0510	
J42	5-PIN FEMALE MOLEX CONNECTOR	5-F-MOLEX	
PREPARED	J. COUCH	2022/02/18	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150
CHECKED	S. MATTINGLY	2022/03/07	TITLE WIRE HARNESS DIAGRAM
ENGINEER			FILENAME: 1122.DWG      DWG NO. 1122

1123			
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
00	GATE 4 PRELIMINARY RELEASE	02/8/22	JDC
01	RENUMBERING SIGNAL PINS	02/18/22	JDC



DWG 1123 BILL OF MATERIALS (BOM)				
IDENTIFIER	DESCRIPTION		PART #	
J46	2-PIN MALE MOLEX MINI-LOCK CONNECTOR		53375-0210	
J47	2-PIN FEMALE MOLEX CONNECTOR		2-F-MOLEX	
J48	2-PIN MALE MOLEX MINI-LOCK CONNECTOR		53375-0210	
J49	2-PIN FEMALE MOLEX CONNECTOR		2-F-MOLEX	
PREPARED	J. COUCH	2022/02/18	PURDUE POLYTECHNIC NEW ALBANY 3000 TECHNOLOGY AVE NEW ALBANY, IN 47150	
CHECKED	A. BOEHM	2022/03/14	TITLE WIRE HARNESS DIAGRAM	
ENGINEER			FILENAME: 1123.DWG	DWG NO. 1123