Bill Of Materials

ID	Sensor	Model Number	Qy	Description	Use	Link
	Zone 1					
9	Cell PLC	CX2030	1	Mid level PLC		Beckhoff CX2030
10	Power Supply	CX2100-0014	1	Power supply for CX20xx, 130W		Beckhoff CX2100
11	License Terminal	EL6070	1	Terminal license key for Twincat 3	licenses will be stored here instead of PLC making it simple to swap PLC	Beckhoff EL6070
12	Safety Card	EL1918	1	8-ch digital input and logic TwinSAFE, TwinSAFE Logic	Safety master executes TwinSAFE logic and spare IO	Beckhoff EL1918
13	Ethercat Junction	EK1122-0008	1	2-port Ethercat Junction M8		Beckhoff EK1122
14	End Cap	EL9011	1	bus terminal end cap		Beckhoff EL9011
15	Ethercat cable	ZK1090-3232-0xxx	1	M8 cable,AWG 26,female-female	M8 cables are more durable and secure than RJ45 and can easily be used with EP blocks	Beckhoff ZK1090-3232-0xxx
	Zone 2					
16	Ethercat Coupler	EK1100-0008	1	EtherCat Coupler with M8 connections		Beckhoff EK1100
17	Safety Card	EL1904	1	4-ch digital input, TwinSAFE	plum to robot x11 (TODO)	Beckhoff EL1908
18	Safety Card	EL2912-2200	1	4-ch digital output, TwinSAFE	plum to robot X11 (TODO)	Beckhoff EL2912
19	Input Card	EL1008	1	8-ch standard digital input	2 for ATI prox sensor unlock/locked	Beckhoff EL1008
20	Output Card	EL2008	1	8-ch standard digital output	4 for pneumatic solenoids, 1 for fluid solenoid	Beckhoff EL2008
21	Terminal Scanner	EL6652	2	2-port EtherNet/IP scanner	1 for keyence comm box, 1 for KUKA robot, 1 for force comm box	Beckhoff EL6652
22	End Cap	EL9011	1	bus terminal end cap		Beckhoff EL9011
23	Optional Comm Unit	CB-EP100	1	EtherNet/IP communication unit	needed to communicate over EtherCat/IP	Keyence CB-EP100
24	Ethernet cable	CA77-005M0-2	1	EtherNet cable CAT7	Keyence requires a CAT7 ethernet cable (pg.1-4)	Digikey Cable
31	Adapter	426-FIT0856	1	DB9 Male to RJ45 Female Adapter	Adapter for Sunrise Instruments Control Box	Mouser DB9-RJ45