

Chapter 7 Wiring Diagrams and Signal Information CONTENTS

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
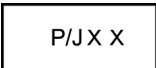
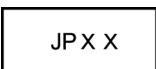
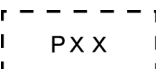
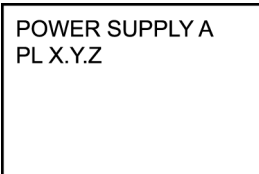
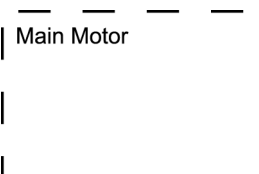
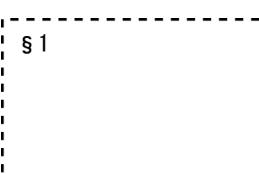


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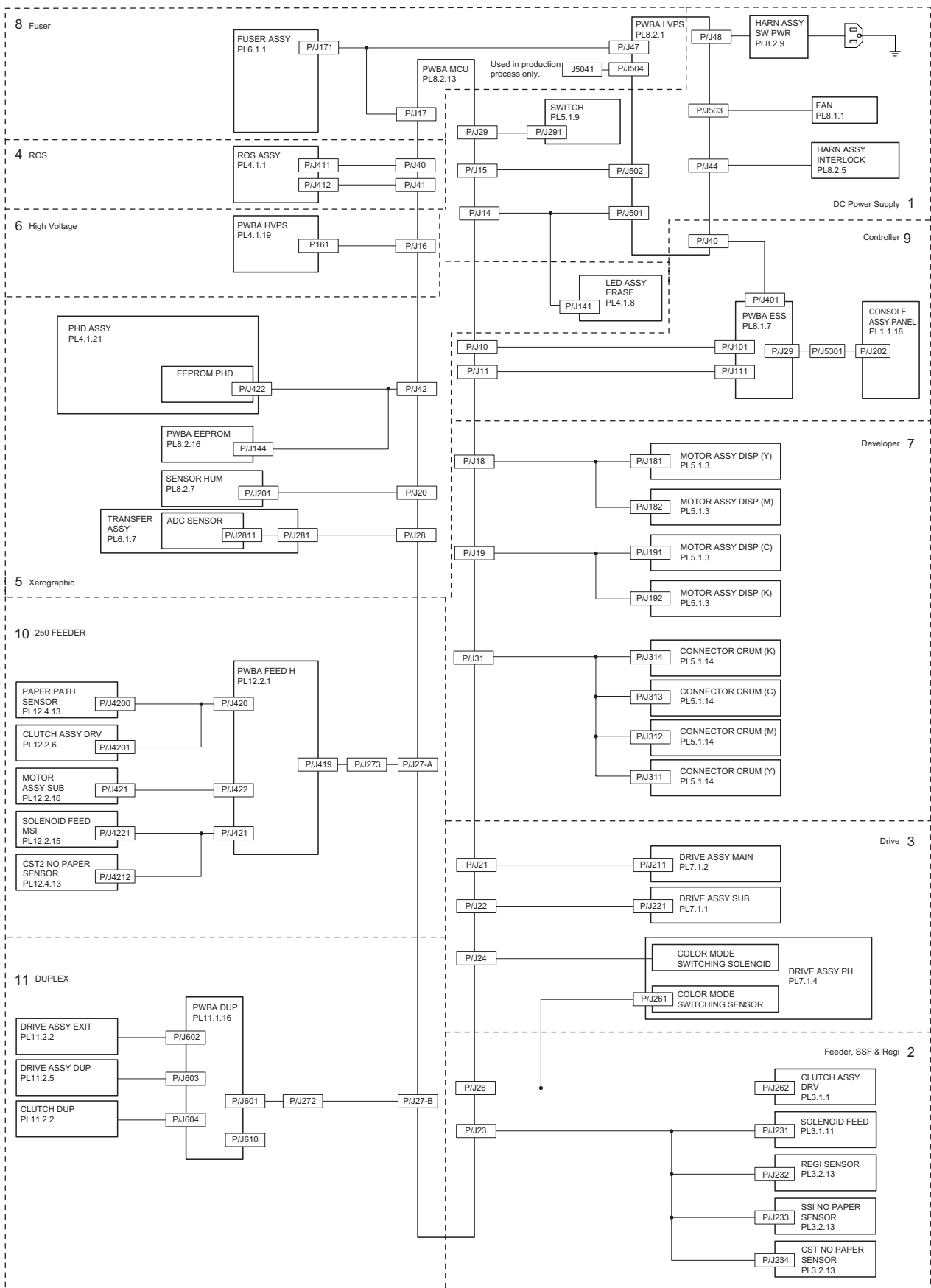
1. Connection Wiring Diagram

1.1 Symbols in the General Connection Wiring Diagram

The symbols in the general connection wiring diagram are described below.

Symbol	Description
	Represents an interconnection between parts using wiring harness or wire.
	Represents an interconnection which differs according to the specifications.
	Represents an interconnection between parts using a conductive member such as a plate spring.
	Represents a connection between parts by tightening of a screw.
	Indicates a frame ground.
	Represents a connector. The connector No. is indicated inside the box.
	Represents a connection terminal with a plate spring on the printed circuit board. The connector (terminal) No. is indicated inside the box.
	Represents a connector directly connected to the printed circuit board. The connector No. is indicated inside the box.
	The box containing a part name represents a part. "PL X.Y.Z" indicates the item "Z" of the plate (PL) "X.Y" described in Chapter 5 "Parts List."
	Represents a functional part within a part, and indicates the name of the functional part.
	Represents a section in "2. Interconnection Wiring Diagram of Parts," and indicates its section No.
	Represents a screw for fixing wiring harness and a conductive member such as a plate spring.
	Represents a conductive member such as a plate spring.

1.2 General Wiring Diagram

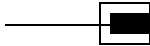
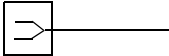
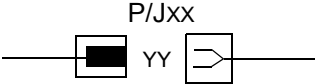
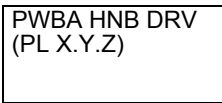
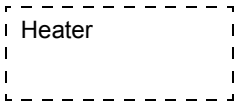

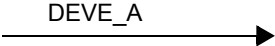
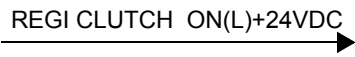
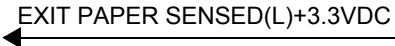


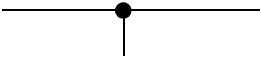
MOG07001KB

2. Interconnection Wiring Diagram of Parts

2.1 Notes on Using the Wiring Diagram between Parts

The following describes the legend of the wiring diagrams between parts shown on the following pages.

Symbols	Description
	Denotes a plug.
	Denotes a jack.
	Denotes Pin yy and Jack yy of the connector Pxx and Jxx.
	Denotes the parts. PL X.Y.Z implies the item "Z" of plate (PL) "X.Y" in Chapter 5. Parts List.
	Denotes functional parts attached with functional parts name.
	Denotes the control and its outline in PWB.
	Denotes a connection between parts with harnesses or wires, attached with signal name/contents.
	Denotes the function, and logic value of the signal to operate the function (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.
	Denotes the function, and logic value of the signal when the function operated (Low: L, High: H). The given voltage is for signal in high status. The arrow indicates the direction of signal.

Symbols	Description
	Denotes a connection between wires.
I/L +24VDC	Denotes DC voltage when the interlock switch in HNB MCU WITH CPU turns on.
+5VDC +3.3VDC	Denotes DC voltage.
SG	Denotes signal ground.
AG	Denotes analog ground.
RTN	Denotes the return.

2.2 Configuration of the Interconnection Wiring Diagram of Parts

The interconnection wiring diagram is divided into 11 sections.
§ 1 to § 11 indicate details of the interconnections of parts.

§ 1 DC POWER SUPPLY

Connections of PWBA LVPS with PWBA MCU.
Connections of HARN ASSY SW PWR with PWBA LVPS.
Connections of HARN ASSY INTERLOCK with PWBA LVPS.
Connections of SWITCH with PWBA MCU.

§ 2 FEEDER, SSF & REGI

Connections of SOLENOID FEED with PWBA MCU.
Connections of REGI SENSOR with PWBA MCU.
Connections of SSI NO PAPER SENSOR with PWBA MCU.
Connections of CST NO PAPER SENSOR with PWBA MCU.
Connections of CLUTCH ASSY DRV with PWBA MCU.

§ 3 DRIVE

Connections of DRIVE ASSY PH with PWBA MCU.
Connections of DRIVE ASSY MAIN with PWBA MCU.
Connections of DRIVE ASSY SUB with PWBA MCU.

§ 4 ROS

Connections of ROS ASSY with PWBA MCU.

§ 5 XEROGRAPHIC

Connections of PWBA EEPROM with PWBA MCU.
Connections of PHD ASSY with PWBA MCU.
Connections of SENSOR HUM with PWBA MCU.
Connections of LED ASSY ERASE with PWBA MCU.
Connections of TRANSFER ASSY with PWBA MCU.

§ 6 HIGH VOLTAGE

Connections of PWBA HVPS with PWBA MCU.

§ 7 DEVELOPER

Connections of DISPENSE MOTOR (Y) with PWBA MCU.
Connections of DISPENSE MOTOR (M) with PWBA MCU.
Connections of DISPENSE MOTOR (C) with PWBA MCU.
Connections of DISPENSE MOTOR (K) with PWBA MCU.
Connections of CONNECTOR CRUM (Y) with PWBA MCU.
Connections of CONNECTOR CRUM (M) with PWBA MCU.
Connections of CONNECTOR CRUM (C) with PWBA MCU.
Connections of CONNECTOR CRUM (K) with PWBA MCU.

§ 8 FUSER

Connections of FUSER ASSY with PWBA MCU.
Connections of FUSER ASSY with PWBA LVPS.
Connections of PWBA MCU with PWBA LVPS.

§ 9 CONTROLLER

Connections of PWBA ESS with PWBA MCU.
Connections of CONSOLE ASSY PANEL with PWBA ESS.
Connections of PWBA LVPS with PWBA ESS.

§ 10 250 FEEDER

Connections of PWBA FEEDER H with PWBA MCU.

Connections of PWBA FEEDER H with CLUTCH ASSY PH TURN.

Connections of PWBA FEEDER H with PATH SENSOR.

Connections of PWBA FEEDER H with SOLENOID FEED.

Connections of PWBA FEEDER H with CST NO PAPER SENSOR.

Connections of PWBA FEEDER H with DRIVE ASSY OPTION.

§ 11 DUPLEX

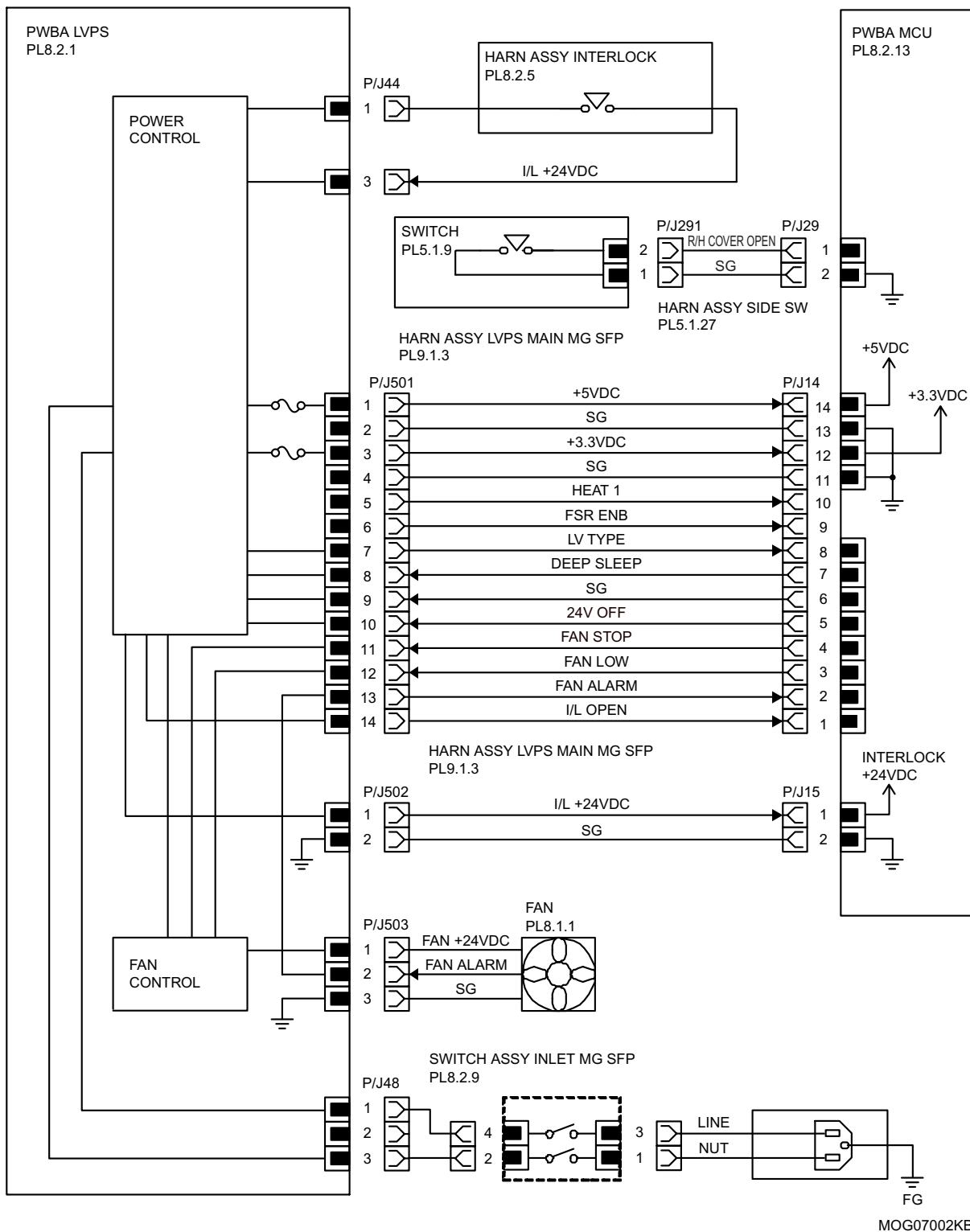
Connections of PWBA DUP with PWBA MCU.

Connections of PWBA DUP with MOTOR ASSY DUP-UP.

Connections of PWBA DUP with MOTOR ASSY DUP-DN.

Connections of PWBA DUP with CLUTCH DUP.

§ 1 DC POWER SUPPLY



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Signal line name	Description
LV TYPE 24V ON	Control signal of the LVPS
FAN LOW FAN STOP ALARM FAN	Drive control signal of the SIDE FAN

- LVPS overcurrent protection circuit

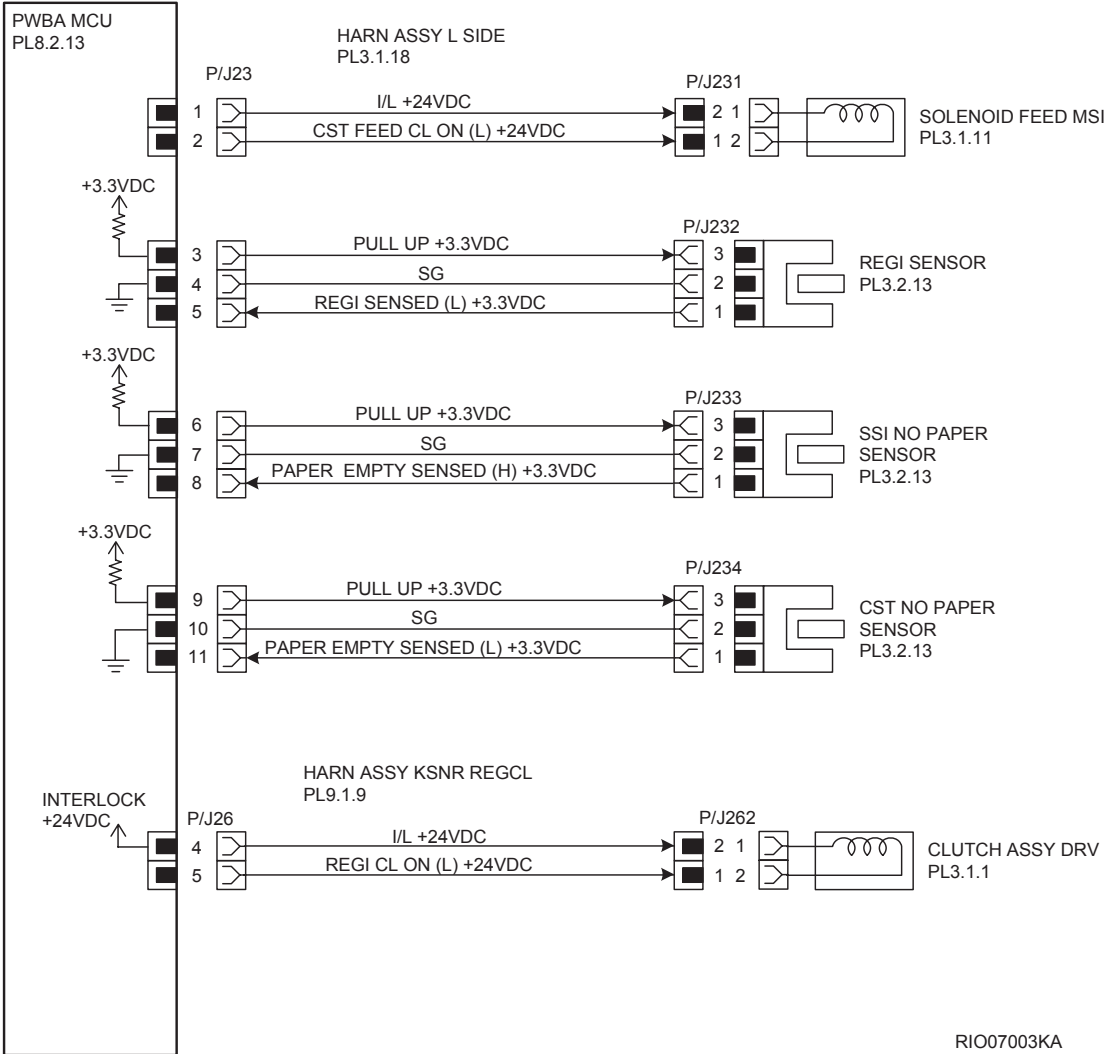
This circuit stops all outputs, if the power supply voltage 24VDC, 5VDC, or 3.3VDC is shorted.

- LVPS overvoltage protection circuit

This circuit stops all outputs, if the power supply voltage 24VDC, 5VDC, or 3.3VDC exceeds the specified voltage respectively.

At this time, the operating point is 36VDC or less for 24VDC, 7VDC or less for 5VDC and 3.3VDC.

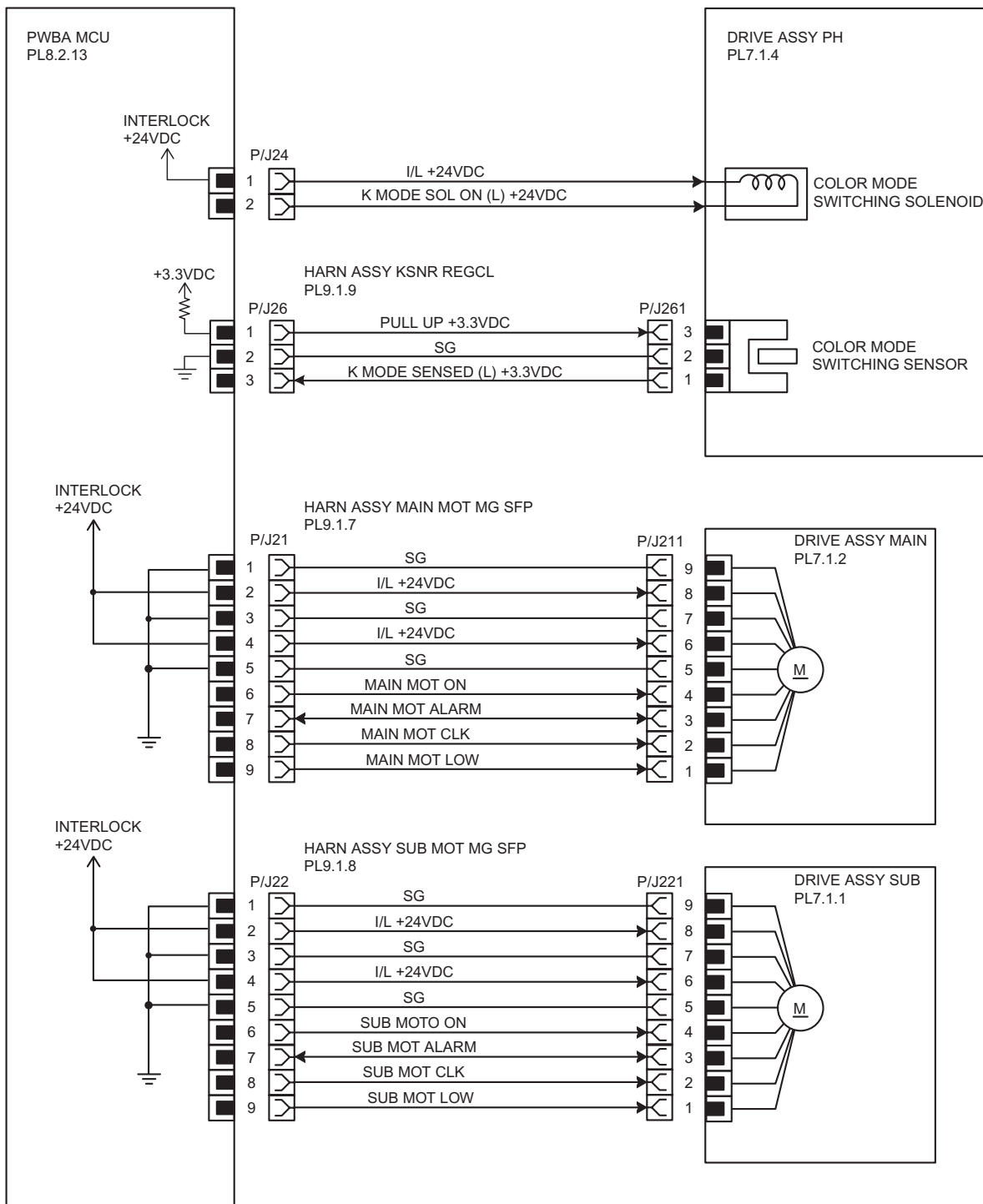
§ 2 FEEDER, SSF & REGI



RIO07003KA

Signal line name	Description
CST FEED CL ON (L) +24VDC	ON/OFF signal of the SOLENOID FEED
REGI SENSED (L) +3.3VDC	Paper detect signal of the Regi part by the Sensor Photo (REGI SENSOR)
PAPER EMPTY SENSED (H) +3.3VDC	Paper detect signal of the SSI by the Sensor Photo (SSI NO PAPER SENSOR)
PAPER EMPTY SENSED (L) +3.3VDC	Paper detect signal of the Paper Cassette by the Sensor Photo (CST NO PAPER SENSOR)
REGI CL ON (L) +24VDC	ON/OFF signal of the CLUTCH ASSY DRV

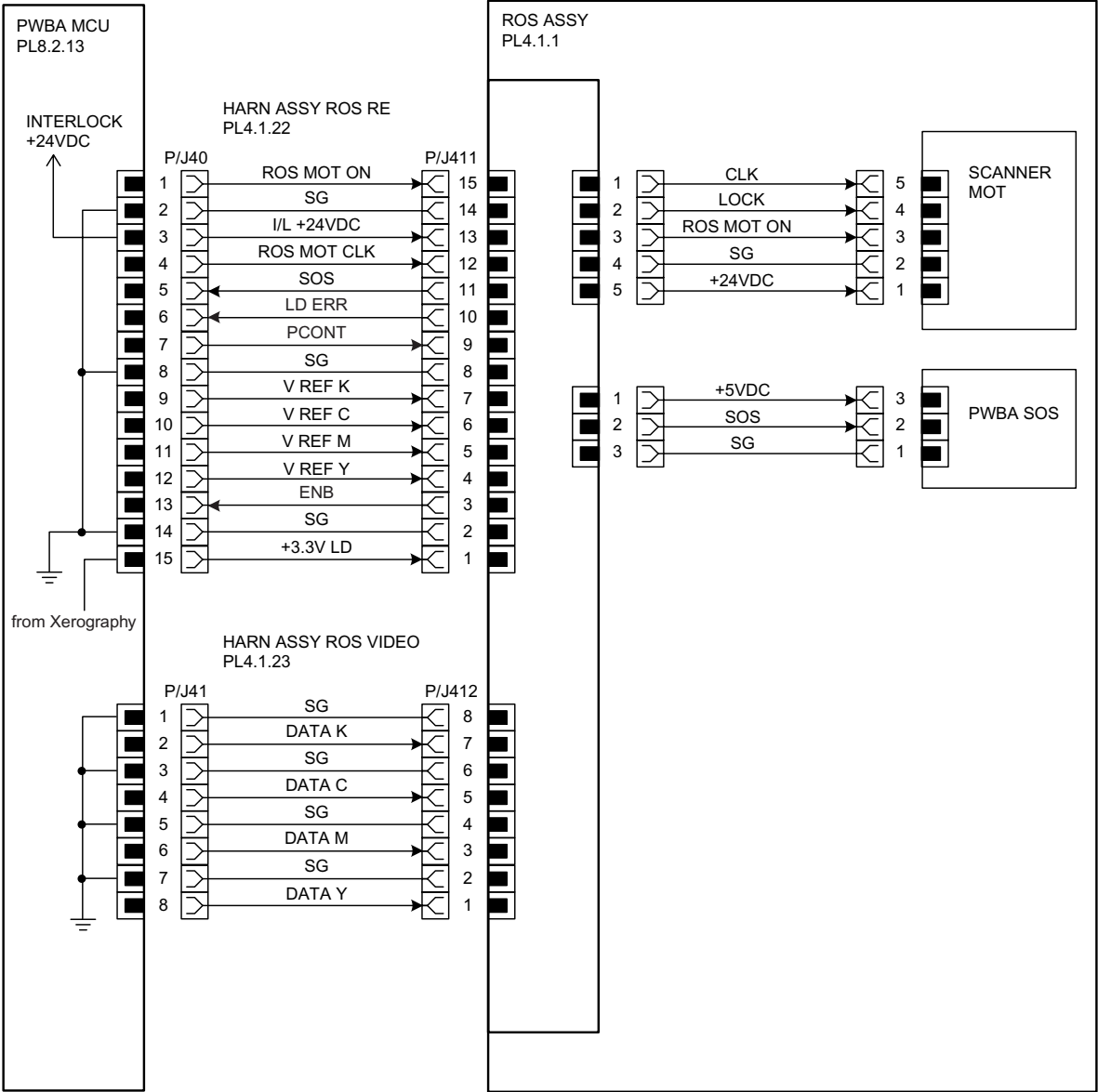
§ 3 DRIVE



MOG07004KB

Signal line name	Description
K MODE SOL ON (L) +24VDC	ON/OFF signal of the COLOR MODE SWITCHING SOLENOID
K MODE SENSED (L) +3.3VDC	Color mode detect signal of the DRIVE ASSY PH by the Sensor Photo (COLOR MODE SWITCHING SENSOR)
MAIN MOT ON MAIN MOT ALARM MAIN MOT CLK MAIN MOT LOW	Drive control signal of the DRIVE ASSY MAIN
SUB MOT ON SUB MOT ALARM SUB MOT CLK SUB MOT LOW	Drive control signal of the DRIVE ASSY SUB

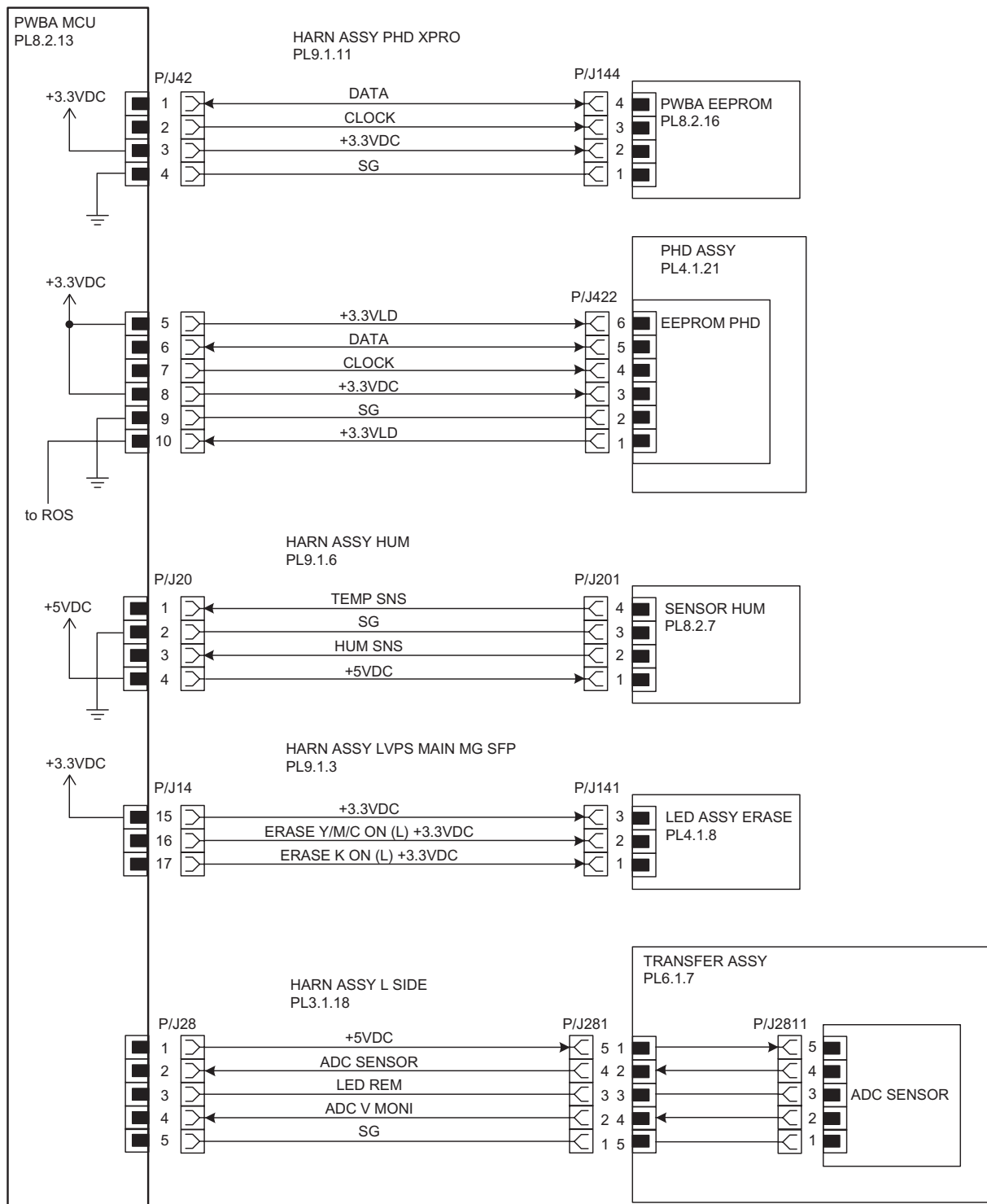
§ 4 ROS



MOG07006KA

Signal line name	Description
ROS MOT ON ROS MOT CLK	Drive control signal of the ROS MOTOR
SOS	Reference signal for scan start of LASER
V REF K V REF C V REF M V REF Y	Emission control signal of the laser diode
LD ERR	Error signal of the laser diode
PCONT	Power control signal of the laser diode
DATA K DATA C DATA M DATA Y	Video signal of the laser diode

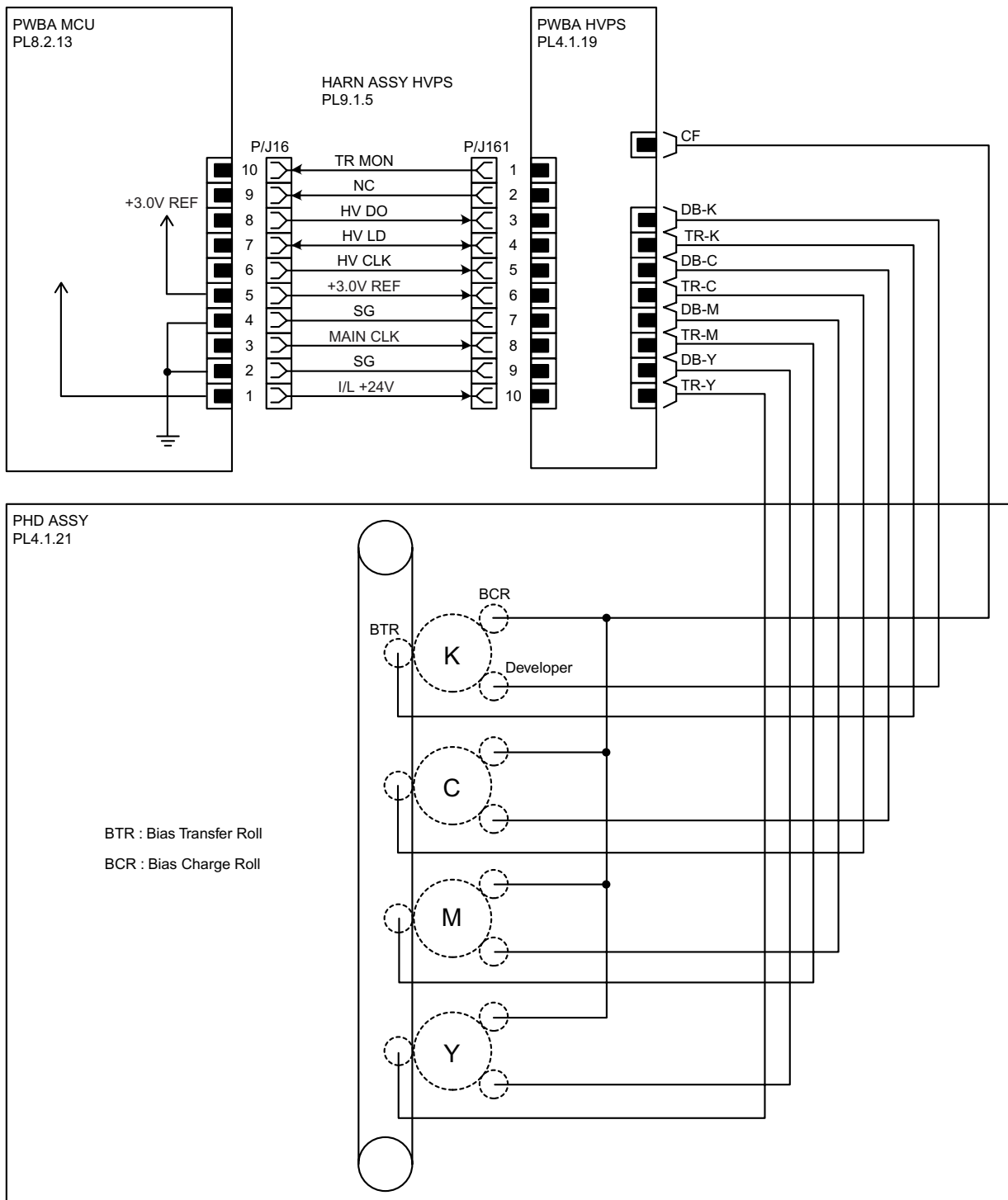
§ 5 XEROGRAPHIC



MOG07007KB

Signal line name	Description
CLOCK DATA	Control signal of the PWBA EEPROM
CLOCK DATA	Control signal of the EEPROM PHD
TEMP SNS	Temperature data in the printer by the SENSOR HUM (Analog value)
HUM SNS	Humidity data in the printer by the SENSOR HUM (Analog value)
ERASE K ON (L) +3.3VDC ERASE Y/M/C ON (L) +3.3VDC	ON/OFF signal of the LED ASSY ERASE
ADC SENSOR	Toner patch density data measured by the ADC SENSOR (Analog value)
LED REM	Remote signal of the LED of ADC SENSOR
ADC V MONI	Control signal of the ADC SENSOR

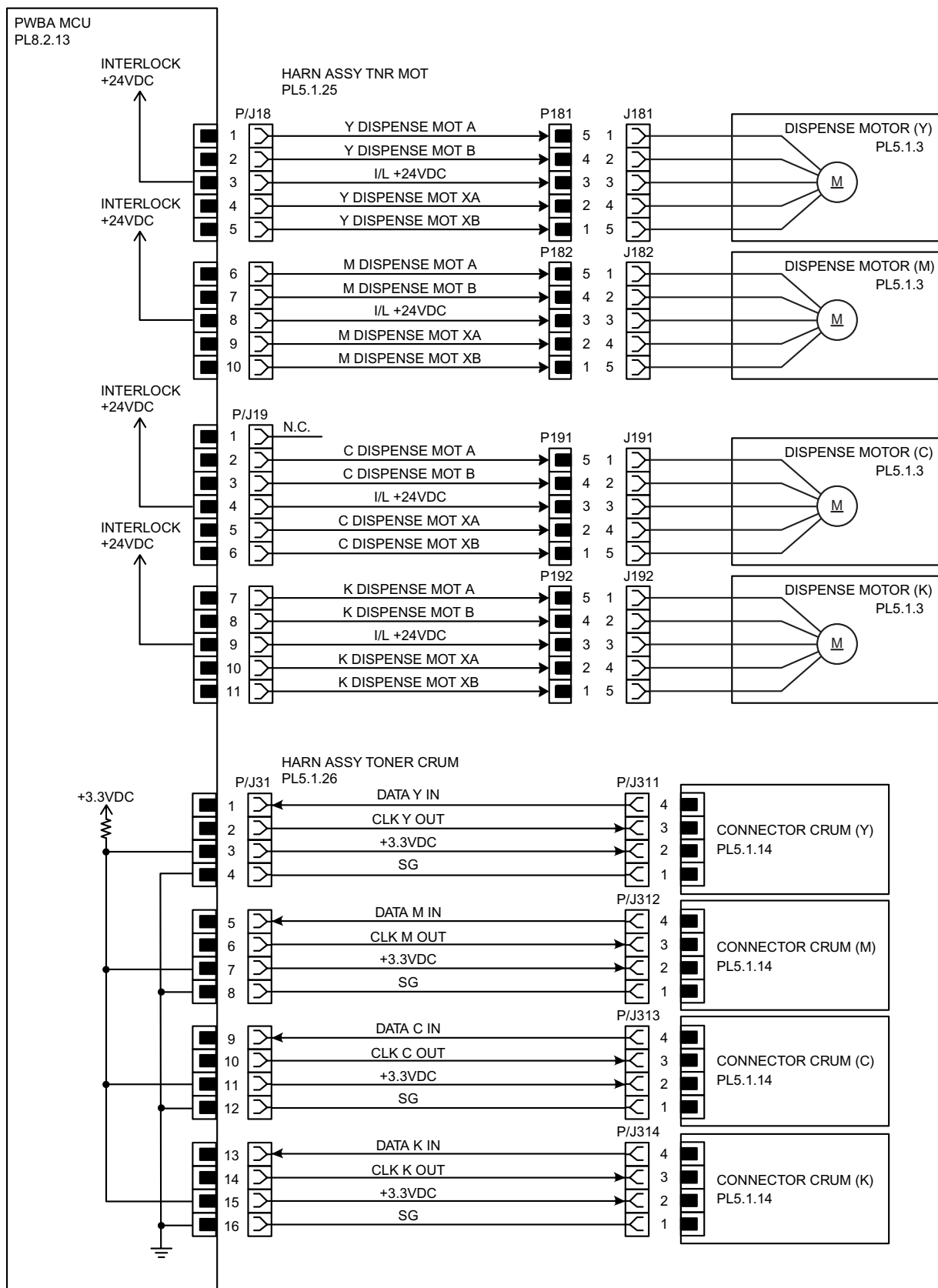
§ 6 HIGH VOLTAGE



MOG07008KA

Signal line name	Description
TR MON HV DO HV LD HV CLK MAIN CLK	Control signal of the HVPS

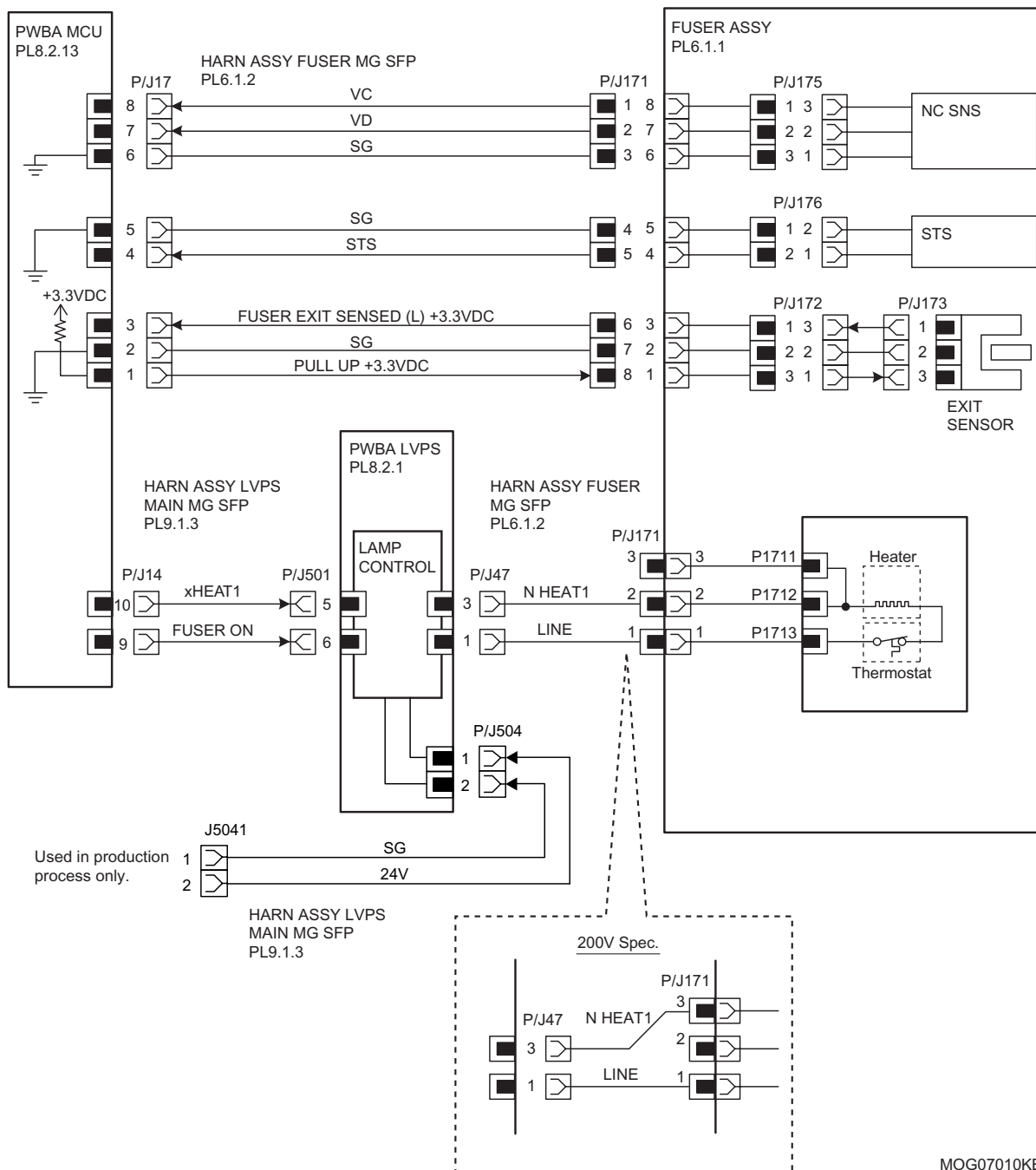
§ 7 DEVELOPER



RIO07009KA

Signal line name	Description
Y DISPENSE MOT A Y DISPENSE MOT B Y DISPENSE MOT XA Y DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (Y)
M DISPENSE MOT A M DISPENSE MOT B M DISPENSE MOT XA M DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (M)
C DISPENSE MOT A C DISPENSE MOT B C DISPENSE MOT XA C DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (C)
K DISPENSE MOT A K DISPENSE MOT B K DISPENSE MOT XA K DISPENSE MOT XB	Drive control signal of the DISPENSE MOTOR (K)
DATA Y IN CLK Y OUT	Control signal of the CONNECTOR CRUM (Y)
DATA M IN CLK M OUT	Control signal of the CONNECTOR CRUM (M)
DATA C IN CLK C OUT	Control signal of the CONNECTOR CRUM (C)
DATA K IN CLK K OUT	Control signal of the CONNECTOR CRUM (K)

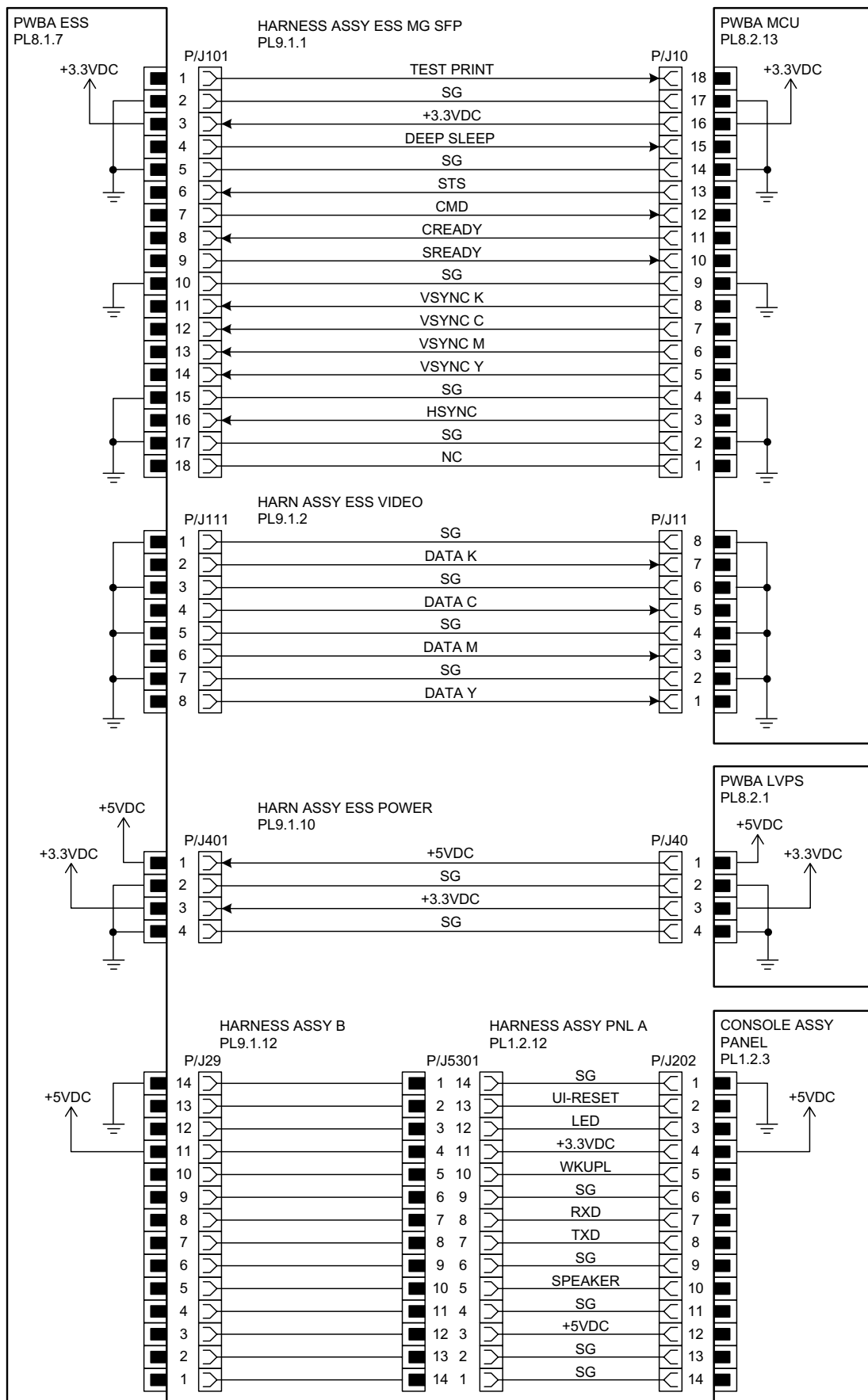
§ 8 FUSER



MOG07010KB

Signal line name	Description
VC VD	Temperature data measured by Temp. Sensor for controlling temperature (analog value)
STS	Heat Roll surface temperature data measured by Temp. Sensor for detecting high temperature (analog value)
FUSER EXIT SENSED (L) +3.3VDC	Paper detect signal of the Fuser Exit by the Sensor Photo (EXIT SENSOR)
FUSER ON	Lighting signal of Fuser Lamp
RELAY TEST LOW RELAY TEST HIGH	Test signal of the LVPS (Used in production process only)

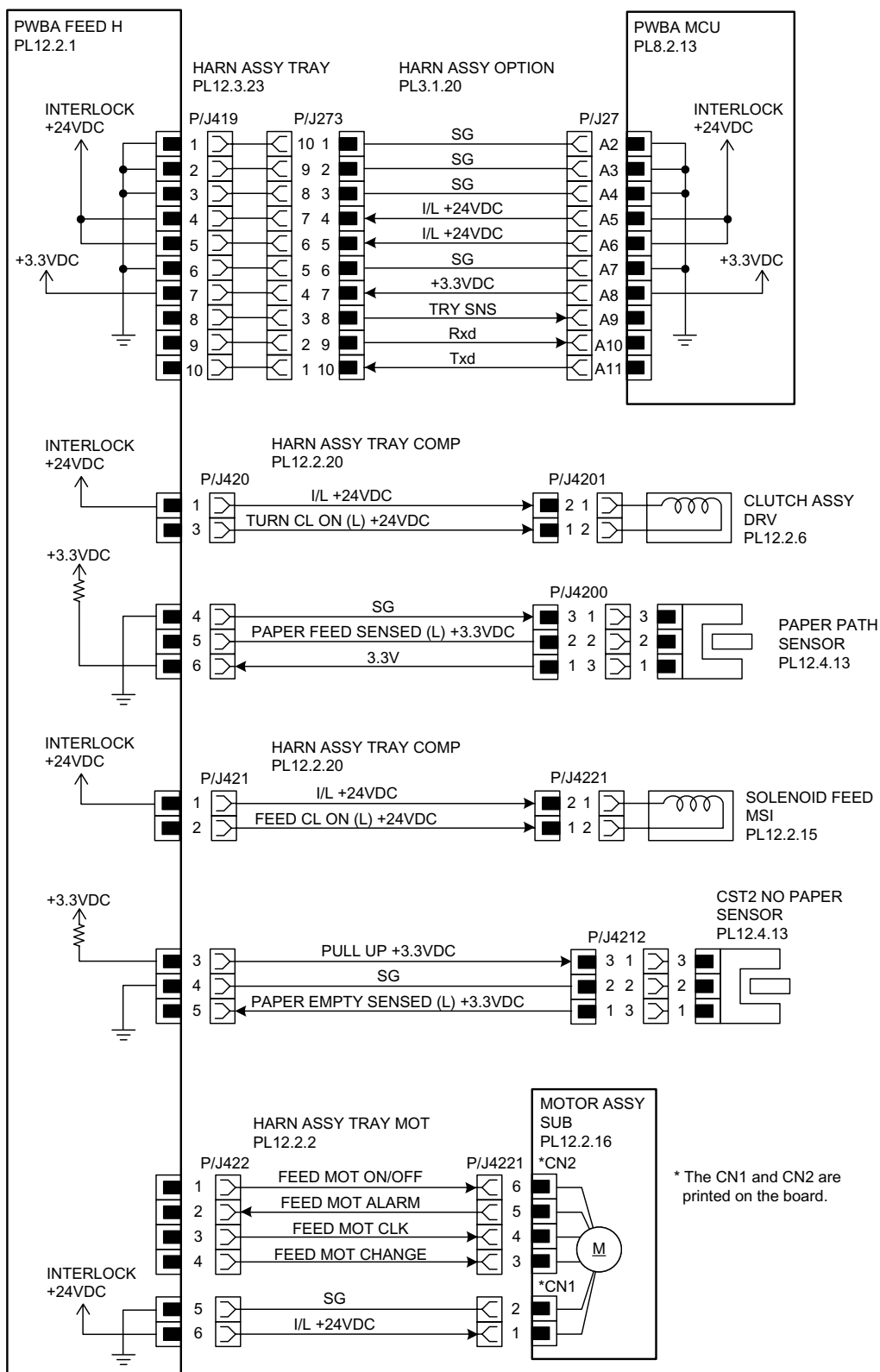
§ 9 CONTROLLER



MOG07011KB

Signal line name	Description
TEST PRINT	Control signal for the TEST PRINT mode
STS	Status signal transmitted fro the PWBA MCU to the PWBA ESS
CMD	Command signal transmitted from the PWBA ESS to the PWBA MCU
CREADY SREADY	Signal for indicating weather or not the printer is ready for receiving command signal
VSYNC K VSYNC C VSYNC M VSYNC Y	Signal for indicating registration position of each of images Y, M, C and K
HSYNC	Signal for data
DATA K DATA C DATA M DATA Y	Video data of four colors
UI-RESET LED WKUPL RXD TXD SPEAKER	Control signal of the CONSOLE ASSY

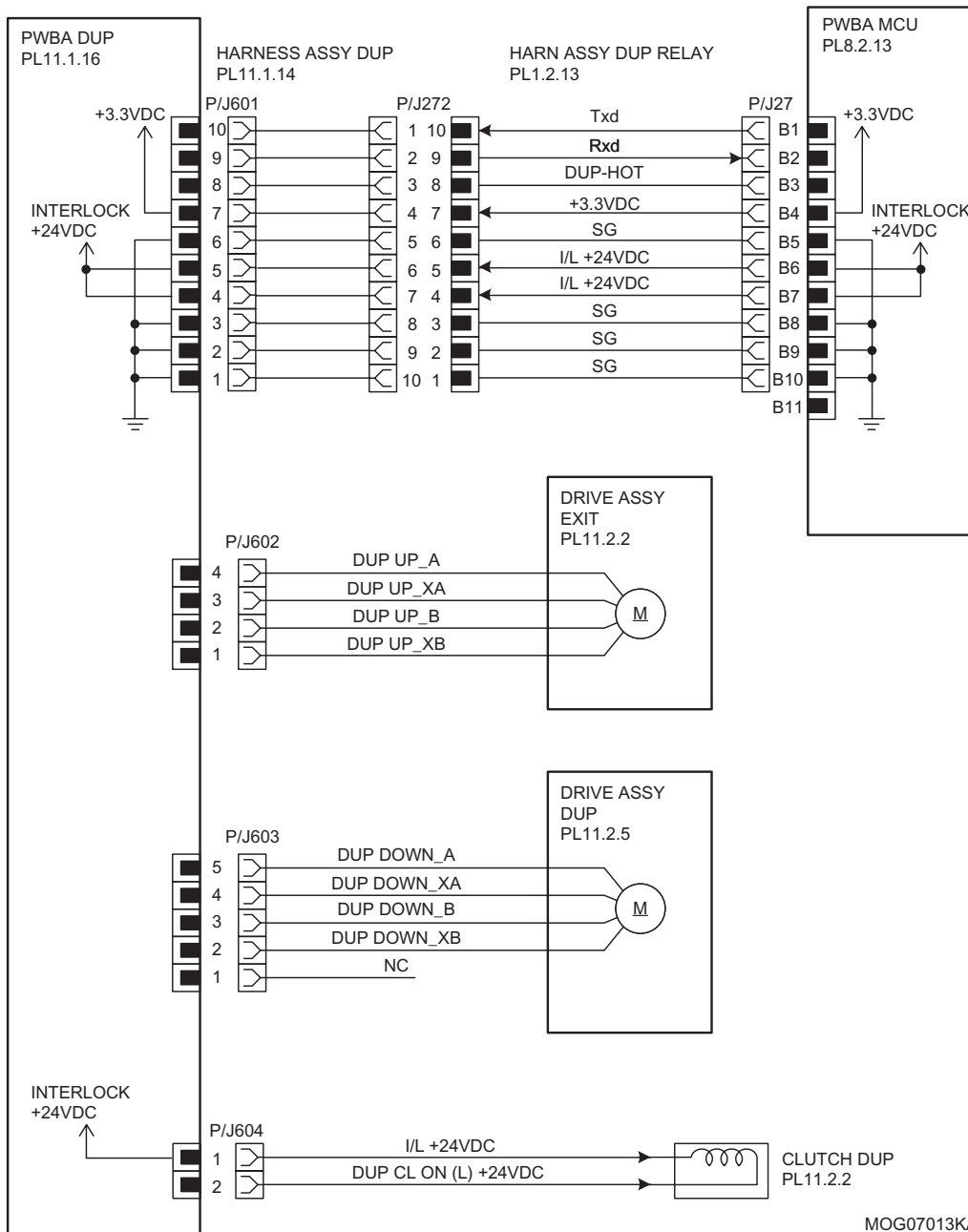
§ 10 250 FEEDER



MOG07012KB

Signal line name	Description
TRY SNS Rxd Txd	Control signal of the PWBA FEEDER
TURN CL ON (L) +24VDC	ON/OFF signal of the TURN CLUTCH
FEED CL ON (L) +24VDC	ON/OFF signal of the FEED CLUTCH
PAPER EMPTY SENSED (L) +3.3VDC	Paper detect signal of the Feeder by the Sensor Photo (NO PAPER SENSOR)
FEED MOT ON/OFF FEED MOT ALARM FEED MOT CLK FEED MOT CHANGE	Drive control signal of the FEED MOTOR

§ 11 DUPLEX



MOG07013KA

Signal line name	Description
DUP-HOT Txd Rxd	Control signal of the PWBA DUP
DUP UP_A DUP UP_XA DUP UP_B DUP UP_XB	Drive control signal of the DUP MOTOR UP
DUP DOWN_A DUP DOWN_XA DUP DOWN_B DUP DOWN_XB	Drive control signal of the DUP MOTOR DOWN
DUP CL ON (L) +24VDC	ON/OFF signal of the DUP CLUTCH
FAN +24VDC FAN ALARM	Drive control signal of the DUP FAN