

# Appendix A

## Block Diagrams, Boards and Pinouts

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## APPENDIX OVERVIEW (pg 1 of 3)

This appendix includes:

- block diagrams and signal pathways
- illustrations of the board layouts
- pinouts and connectors

The five boards described in this appendix are (in alphabetical order):

- Analog Board
- Digital I/O Board
- Liquid Level Sense Board
- Motor Driver Board
- Power Supply

The eight system functions/operations described in this appendix are (in alphabetical order):

- Bar Code Reader
- Boom Arm Operation
- Carousel movement
- Dispense operation
- Heater operation
- Input/Output
- Level Sense operation
- MEIA Optics operation

## Appendix Overview (pg 2 of 3)

### Pinouts and Connectors

This appendix includes pinout and connector information. The information for a board follows the illustrations of that board.

Information is provided for these connections:

- Analog Board to:
  - CPU Board
  - Digital I/O Board
  - Lamp Power Supply
  - Motor Driver
  - Optics Assembly
  - PMT HV Supply
  - Sensors
- Digital I/O Board to:
  - Display
  - Keyboard
  - Motor Driver
- To Liquid Level Sense Board from:
  - Probe COAX
  - Analog
  - Power Supply
  - Carousel Receiver COAX
  - Reagent Receiver COAX

## Appendix Overview (pg 3 of 3)

### Pinouts and Connectors (cont)

- Motor Driver to:
  - Digital I/O
  - Analog
  - Heaters
  - Carousel Motor
  - Boom Assembly
  - Pump Assembly
  - Power Supply
- Power Supply to:
  - 110/Motor Driver
  - Analog/Motor Driver
  - Card Cage
  - Display
  - Printer