



100B Ethernet on MB  
from Aft Cam  
Aft Expansion Port  
RJ-45 CAT 6 Ethernet Plug

100B Ethernet on MB  
from BSC  
RJ-45 CAT 6 Ethernet Plug

Optional BSC

RockPie  
BSC Option

Nvidia Nano  
BSC Option

10021161-13-H12  
HARNESS 10021161-13-H2

10021161-13-H13  
HARNESS 10021161-13-H3

**T568B**

| Pin | Color  |
|-----|--------|
| 1   | white  |
| 2   | orange |
| 3   | white  |
| 4   | blue   |
| 5   | white  |
| 6   | green  |
| 7   | white  |
| 8   | brown  |

Verify RJ-45 pinout  
in EIA-568b

REV.T

19-88

Front of Pin Insert

NOTE: Board position on drawing does not correspond to board position in vehicle. Core payloads not shown: Thruster, Rudder, Elevator, Mass, Cradlepoint, NAL, Depth

|   |             |    |                                                                                               |
|---|-------------|----|-----------------------------------------------------------------------------------------------|
| W | 17 Jan 2020 | BH | Added Port 1 Ethernet-serial-power                                                            |
| V | 8 Aug 2019  | BH | Added ESP PPP MB Jumper and LCBs                                                              |
| U | 29 Oct 2018 | MC | Modified wiring for new PAR sensor with internal pre-amp. Excitation now supplied by A/D LCB. |
| T | 01 Aug 2016 | MC | Modified wiring for ESP serial comms to shielded single conductor to reduce x-talk.           |
| S | 29 Mar 2016 | PC | Added wiring and LCB for Spartron Compass                                                     |

|   |             |     |                                                                                                                                                                              |
|---|-------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| R | 5 Feb 2018  | PC  | Corrected wiring to the ESP PPP Comms LCB                                                                                                                                    |
| P | 26 Jan 2018 | PC  | Changed cable lengths and labels. Added connectors for ESP LCBs to be ESP ready. Changed representation of 'trigger wire' for DVL to make accurate. Made pin 76 single wire. |
| N | 2 Jan 2017  | BWH | Added Port 1 NBDISI, NBDISI PCB, Port 8 Wiring and 232/Batt LCB for Payload/Slipper. Removed ESP LCBs and PPP Motherboard cable                                              |
| M | 29 Jun 2016 | ECM | Change DVL Power from 24V to VBat (change LCB, change P49)                                                                                                                   |
| L | 19 Apr 2016 | ECM | Repurpose ISUS comm cable, for ESP PPP via LCB to Mobo. Delete slot numbers from LCB callouts.                                                                               |

|   |             |     |                                                                                                |
|---|-------------|-----|------------------------------------------------------------------------------------------------|
| K | 27 Jan 2016 | ECM | Swap Tx/Rx on DAT, DVL, CTD, DO2, and Puck LCBs. Add lengths from redline markups.             |
| J | 3 Nov 2015  | ECM | Change Compass LCB and wiring to 2325V                                                         |
| H | 12 Oct 2015 | ECM | correct P47 and C136-C144 properties for BOM                                                   |
| G | 1 Jul 2015  | ECM | correct W63 Manufacturer and Distributor callout (was Belden, is Welco)                        |
| F | 4 May 2015  | ECM | Change USB cable to Ethernet, add LCB Micro Mate N-Lok contacts and correct DAT Molex contacts |

|   |             |     |                                                                                     |
|---|-------------|-----|-------------------------------------------------------------------------------------|
| E | 8 Jun 2015  | ECM | Replace Benthos DAT Modem cables with in-house fabricated cables and parts callouts |
| D | 29 Apr 2015 | ECM | Move this page out of 10021167 and insert here inside 10021165, add BOM info        |
| C | 30 Jan 2015 | ECM | Re-arrange LCBs, show ISUS as future expansion.                                     |
| B | 30 Jan 2015 | ECM | Delete Neil Brown CTD and Add Sea-Bird Gilder CTD. Change wiring and LCB config.    |
| A | 30 Jan 2015 | ECM | Fork from Dwg 10021111 Makai Forward Section Connector for ESP                      |

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Document Number: **100221161**  
Sheet: **13** of **15**

File: **Fwd Section Connector, LRAU/ Internal Pressure Vessel Wiring, Build5**  
Date: **Thursday, February 12, 2020**  
Author: **Mulligan**  
Checked: **W**

Design File: **100221161-13-H1.dwg**  
Schematic Name: **100221161-13-H1.dwg**  
Page Name: **100221161-13-H1.dwg**  
Layout File: **100221161-13-H1.dwg**