Virtual AIS Beacon (VAB1252, VAB1250) <u>Internal Photos</u>

Report #: VAB1252007



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Version History

| Version | Date | Comment |
|---------|--------|------------------------------------|
| 1.1 | 6/7/15 | Virtual AIS Beacon Internal Photos |
| | | |

Authorised By:

Carl Omundsen Engineering Director

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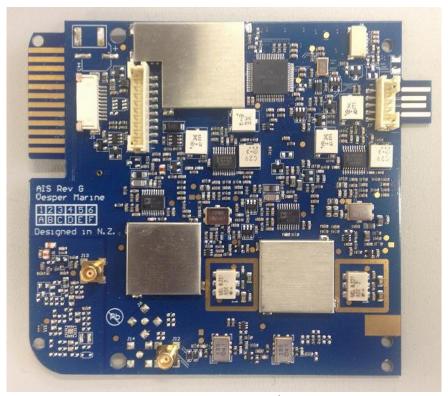
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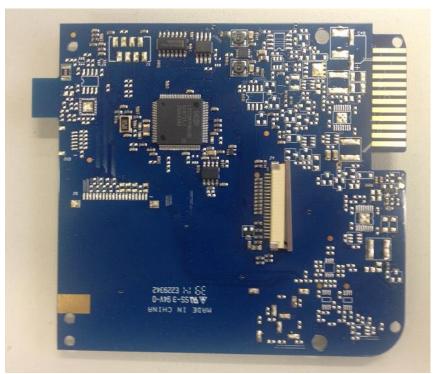
Product Identification & Technical Specifications

| Product Identification | |
|---|---|
| Product Family | VAB (Virtual AIS Beacon) |
| Product Manufacturer Details | Vesper Marine Ltd., 45 Sale Street, Freemans Bay, Auckland 1010, New Zealand |
| Model Number(s) | VAB1250, VAB1252 |
| Intended Users | General Public |
| Equipment type | Fixed (Not portable), Exposed to Weather |
| General Technical Specifications | |
| Power Supply | 12VDC |
| Frequency Range | 156.025 – 162.025 MHz (Marine VHF Band) |
| Transmit Power | 41dBm (12.5W), 33dBm (2W) |
| Modulation | FM GMSK |
| Channel Spacing | 25kHz |
| Temperature Range | -25 to +55 deg C |
| GPIO | 4 x Digital Outputs, 4 x Digital Inputs |
| GPS Receiver | 50 Channel, -159dBm acquiring |
| SD Card | SDXC (optional) |
| Configurable Comms | |
| Port 1 | Ethernet or RS232 (default) |
| Port 2 | RS485, RS422 or RS232 (default) |
| Ethernet | 10/100 Mbps Ethernet, 1.5kVrms Isolation |
| RS232 | 4800-230400 baud, +/-50V Isolation |
| RS485/RS422 | 4800-230400 baud, 2.5kVrms Isolation |

Internal Photos - PCB Assemblies



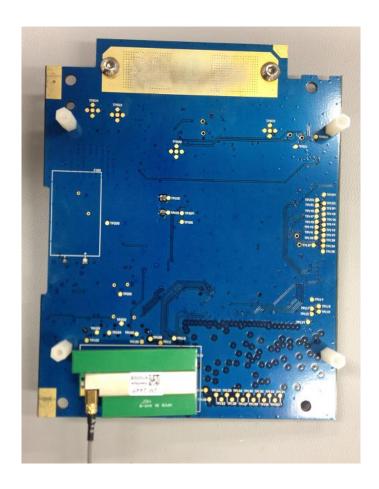
AIS Engine – Top Side



AIS Engine – Bottom Side



VAB Daughter Board – Top Side



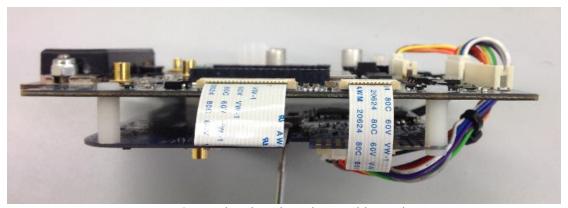
VAB Daughter Board – Bottom Side (showing GPS module location)



AIS Engine & VAB daughter-board Assembly – Front View



AIS Engine & VAB daughter-board Assembly – Back View



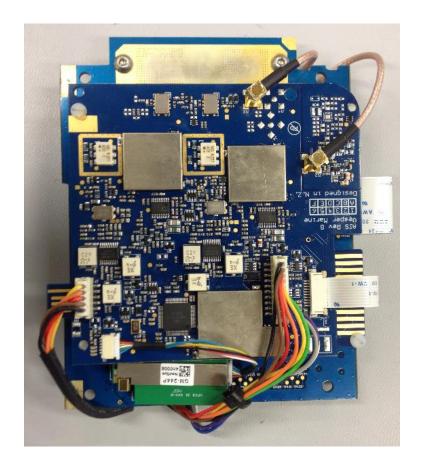
AIS Engine & VAB daughter-board Assembly – Side View 1



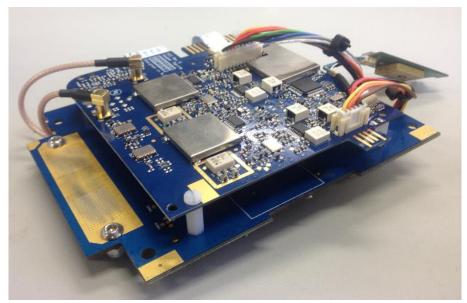
AIS Engine & VAB daughter-board Assembly – Side View 2



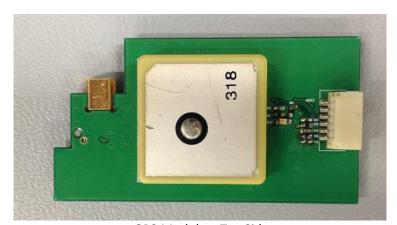
AIS Engine & VAB daughter-board Assembly – Top View



AIS Engine & VAB daughter-board Assembly - Bottom View (including GPS)



AIS Engine & VAB daughter-board Assembly



GPS Module – Top Side



GPS Module – Bottom Side

Internal Photos - Assembly Stack Up



VAB Assembly in Housing (lid removed) - View 1



VAB Assembly in Housing (lid removed) – View 2