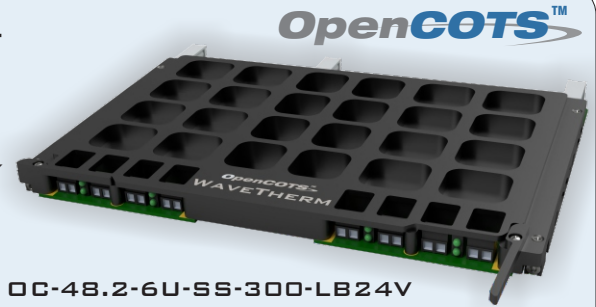
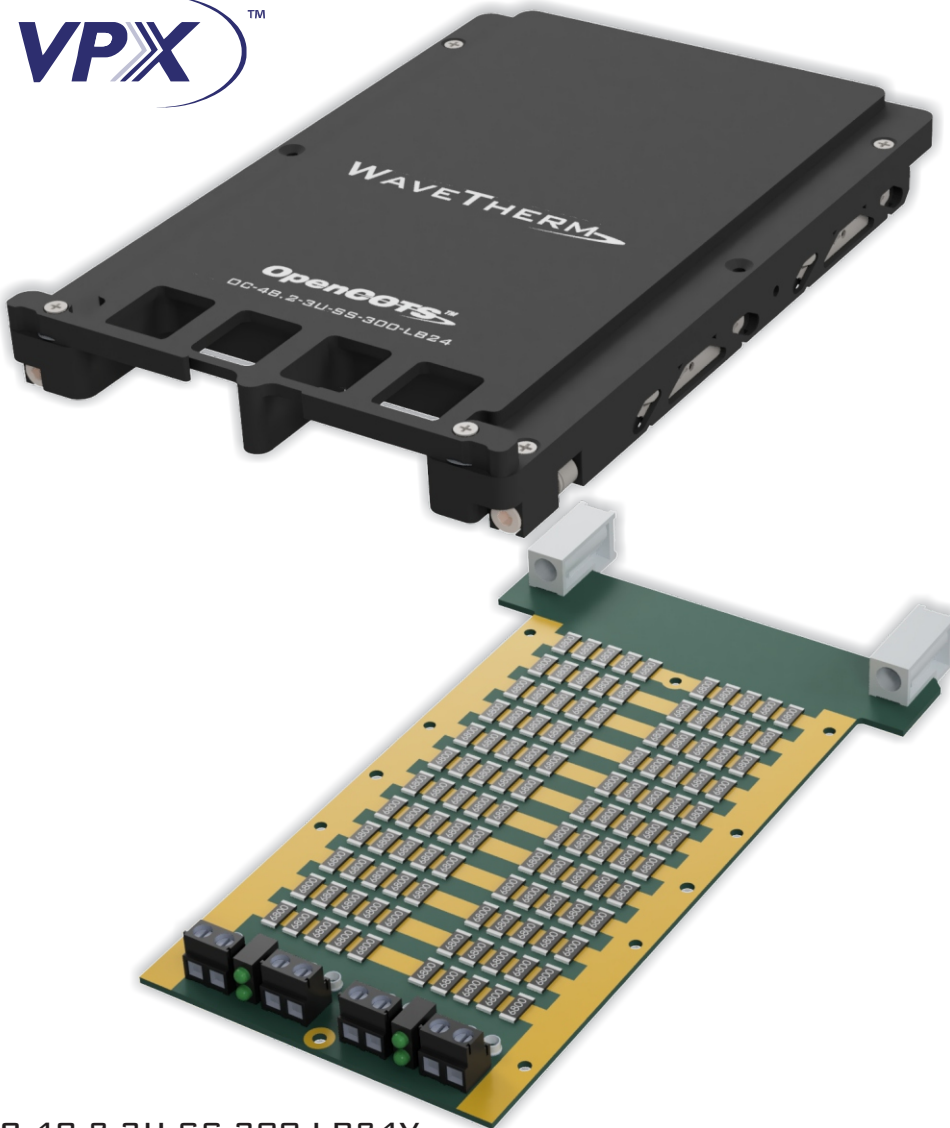


THE WAVE THERM CONDUCTION-COOLED THERMAL LOAD-BOARD MODULE IS A COST-EFFECTIVE SOLUTION FOR THERMAL TESTING OF RUGGED OR MIL-SPEC ENCLOSURES AND SYSTEMS USING WEDGE LOCKS. THE PCB DESIGN PERMITS YOUR CHOICE OF EITHER PRIMARY OR SECONDARY SIDE WEDGELOCK POSITIONING FOR COMPATIBILITY WITH SYSTEMS USING EITHER WEDGELOCK CONFIGURATION.



DC-48.2-6U-SS-300-LB24V



DC-48.2-3U-SS-300-LB24V
SHOWN ABOVE

KIT INCLUDES:

- HOST HEAT FRAME
- 2X TYPE T THERMOCOUPLES
- PCB LOAD BOARD
- 2X LOAD BOARDS (6U)
- SOLIDWEDGE™ RETAINERS
- EJECTORS
- FULLY ASSEMBLED

TWO TYPE T THERMOCOUPLES
EMBEDDED IN HEAT FRAME WITH
LEADS ACCESSIBLE TO USER

MAX 115W PER PCB

12V / 24V / 48V

3U / 6U AVAILABLE

STORAGE TEMP
-50 TO 100°C

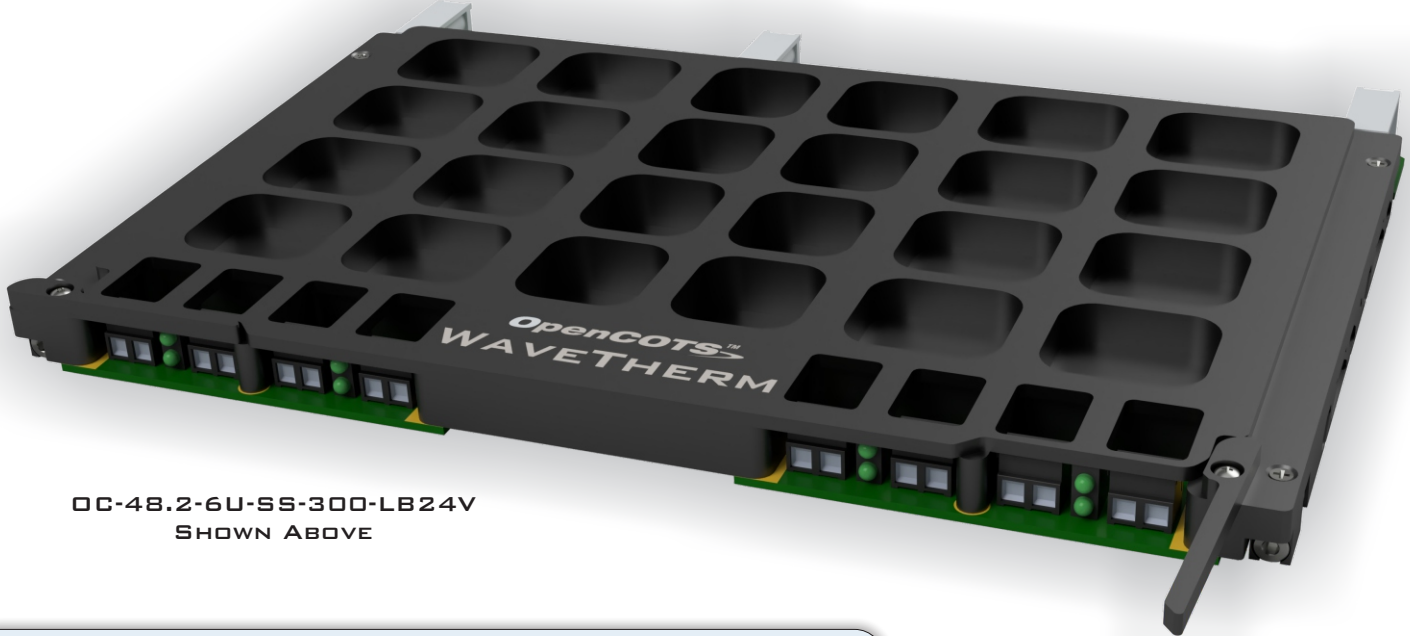
VITA 48.2

THE WAVE THERM CONDUCTION-COOLED THERMAL LOAD BOARD MODULE IS PART OF THE OPENCOTS PORTFOLIO OF PRODUCTS INTENDED FOR ACCELERATED PRODUCT DESIGN AND REAL-WORLD QUALIFICATION TESTING OF 3U AND 6U CONDUCTION-COOLED SINGLE BOARD COMPUTERS. WAVE THERM'S OPENCOTS PRODUCTS FACILITATE FASTER TIME-TO-MARKET, REDUCE ENGINEERING ALLOCATIONS, AND MINIMIZE PRODUCTION FABRICATION COSTS.

OVERVIEW:

THERE ARE THREE STANDARD VERSIONS DESIGNED FOR VOLTAGES OF 12 VDC, 24 VDC, 48 VDC, AND EACH PCB DISSIPATES UP TO 115 WATTS AT THE STATED VOLTAGE. THE APPLIED VOLTAGE MAY BE REDUCED USING A VARIABLE POWER SUPPLY TO OBTAIN THE EXACT POWER DISSIPATION REQUIRED TO MEET THE TESTING REQUIREMENTS OF YOUR SYSTEM.

THERE IS NO ELECTRICAL CONNECTION TO THE BACKPLANE; HOWEVER, VPX ALIGNMENT SOCKETS ARE INSTALLED. EACH BOARD IS POWERED VIA FOUR FRONT EDGE WIRING CONNECTORS ALLOWING THE USER TO CHOOSE TO SUPPLY POWER FROM 1 TO 4 OF THE RESISTOR BANKS ON THE BOARD. THE RESISTORS ASSOCIATED WITH EACH BANK ARE DISTRIBUTED EVENLY ACROSS THE BOARD'S SURFACE SO THAT ANY COMBINATION OF BANKS CHOSEN WILL DISSIPATE ITS ENERGY EVENLY THROUGHOUT THE BOARD. THE LOAD BOARD IS MANUFACTURED WITH THE PROPER RESISTOR VALUES TO ALLOW IT TO OPERATE AT ONE OF THE STANDARD VOLTAGES: 12, 24, OR 48 VDC. AT RATED VOLTAGE, THE BOARD WILL DISSIPATE 115 WATTS OF POWER. ANY VERSION OF THE LOAD BOARD CAN BE OPERATED AT A VARIABLE VOLTAGE UP TO THE NOMINAL RATED VOLTAGE TO ALLOW FOR FINE TUNING THE APPLIED HEAT LOAD IN THE UNIT UNDER TEST. GREEN LED'S INDICATE EACH BANK THAT IS POWERED AND THE POWER FOR EACH BANK IS ROUTED THROUGH A SLOW-BLOW FUSE TO PROTECT THE BOARD IN THE EVENT THAT AN INCORRECT, HIGHER VOLTAGE IS APPLIED.



OC-48.2-6U-SS-300-LB24V
SHOWN ABOVE

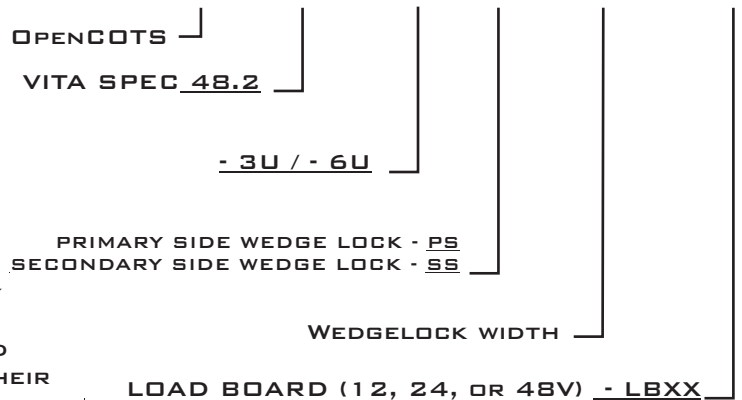
NOTE: 6U ASSEMBLY HAS TWO SEPARATE PCBs AND SHOULD BE WIRED INDEPENDENTLY.

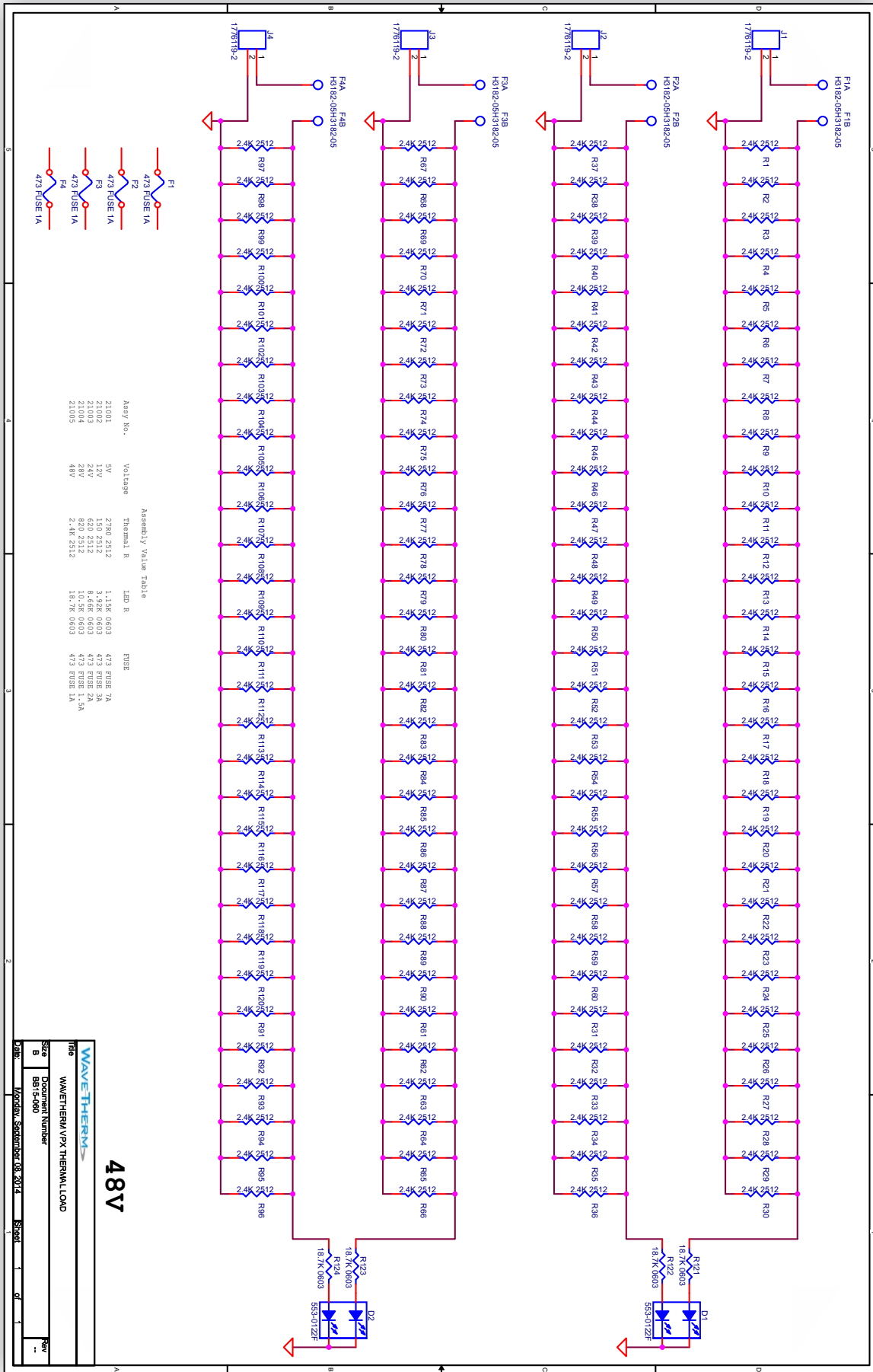


THE WAVETHERM CONDUCTION-COOLED THERMAL LOAD BOARD MODULE IS PART OF THE OPENCOTS™ PORTFOLIO OF PRODUCTS WHICH ARE INTENDED FOR ACCELERATED PRODUCT DESIGN AND REAL-WORLD QUALIFICATION TESTING OF 3U AND 6U CONDUCTION COOLED, SINGLE BOARD COMPUTERS. WAVETHERM'S OPENCOTS™ PRODUCTS FACILITATE FASTER TIME-TO-MARKET, REDUCE ENGINEERING ALLOCATIONS, AND MINIMIZE PRODUCTION FABRICATION COSTS.

SINGLE-BOARD COMPUTER MANUFACTURERS WHICH RELY ON WAVETHERM CAN IMPROVE THE THERMAL PERFORMANCE OF THEIR EMBEDDED COMPUTERS, SPEND MORE OF THEIR R & D DOLLARS ON RESOURCES FOR THEIR KEY VALUE-ADD, AND BE MORE FLEXIBLE TO THE NEEDS OF THEIR CUSTOMERS.

PART NUMBER BUILDER
OC-48.2-3U-SS-300-LB24





WIRING CONSIDERATIONS

RECOMMENDED WIRING:

SINGLE COMMON INPUT WIRE
SINGLE VOLTAGE INPUT WIRE
JUMPER ALL V+ TERMINALS

ALTERNATE WIRING:

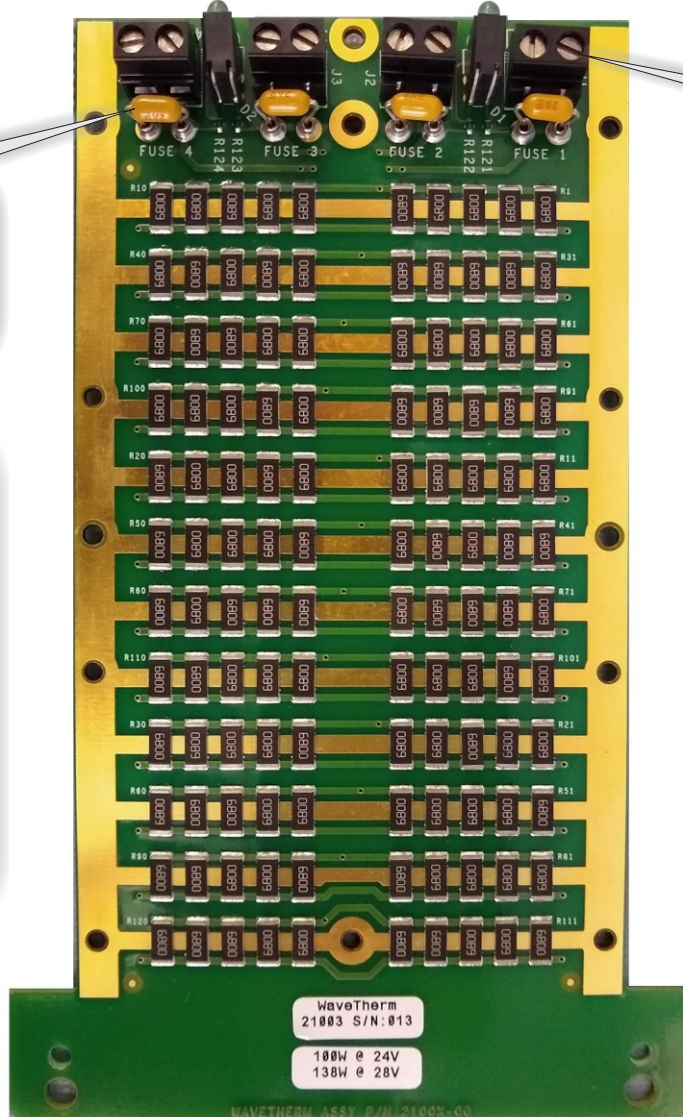
SINGLE COMMON INPUT WIRE
MULTIPLE VOLTAGE INPUT WIRES

NOTE: TERMINAL BLOCK CAN ACCOMMODATE
TWO 18AWG STRANDED WIRES

CONTROL LOAD WITH RESISTOR BANKS
STATIC VOLTAGE INPUT
EACH TERMINAL 1/4 OF MAX LOAD

CONTROL LOAD WITH VARIABLE PSU
USING LOWER VOLTAGE.

COM V+ COM V+ COM V+ COM V+



FUSE 4X:

LITTLE FUSE, INC.
12V - 0473003.MRT1L
24V - 0473002.MRT1L
48V - 0473001.MRT1L

ALL COMMON
TERMINALS ARE
ELECTRICALLY
CONNECTED ON THE
BOARD AND
REQUIRES ONLY A
SINGLE COMMON
WIRE.

TERMINALS 4X
TE - 1776119-2
MAX 10 AMPS

RATED POWER:

12V - 115 WATTS
24V - 115 WATTS
48V - 115 WATTS

DC INPUT TERMINALS ARE
INDEPENDENT OF OTHER
TERMINALS.

EACH TERMINAL BLOCK
POWERS 1/4 OF BOARD.

COMMON TERMINALS ARE
ELECTRICALLY
CONNECTED ON PCB.

6U ASSEMBLY WILL HAVE
TWO LOAD BOARDS

ALL PCB ASSEMBLIES ARE VOLTAGE SPECIFIC.
ORDER PCB ASSEMBLY BASED ON DC VOLTAGE.
PCB ASSEMBLIES AVAILABLE IN 12V, 24V AND 48V.
NOTE: 24V PCB ASSEMBLY CAN OPERATE AT 28V ~ 138 WATTS