

Repair Policy for TMS34020-based Graphics Boards

Revised June 12, 2007

Rastergraf is the official repair and support facility for all TMS34020-based VMEbus, Q-Bus, TURBOChannel, PMC and PCI boards manufactured by Curtiss-Wright Controls Embedded Computing (CWCEC) or its subsidiary, Peritek (formerly Peritek Corporation). *Please note that Q-Bus, PCI, and TURBOChannel boards can no longer be tested or repaired.*

The following outlines the official policy of Rastergraf, Inc. regarding long-term support of these boards.

Normal production of all versions of these boards was terminated several years ago. The TMS34020 graphics processor, VRAM (video memory), and the color map chips used in all versions of these boards are no longer manufactured. However, these parts remain available in limited quantities and at high prices through parts brokers.

Rastergraf maintain a limited stock of repair parts. However, once they have been consumed and if no broker-sourced parts can be found, these boards will become unrepairable. In this case, if replacement board is available, the customer will be offered the option of buying the replacement. The test and analysis fee will be invoiced, but will be credited the price of the replacement board.

If a board cannot be repaired, the customer will have the option of having the board and/or removable modules returned to them. If the customer elects to leave the board at Rastergraf, it is with the understanding that the board will be stripped of usable parts and discarded. No payment will be made for these stockpiled parts.

Under this policy, Rastergraf will accept any of the TMS34020-based VMEbus or PMC boards for diagnosis. There will be a non-refundable \$350 (US) charge to test each board and analyze any problems. An irrevocable purchase order for the testing charge (per board) and the issuance by Rastergraf of an RMA (Return Material Authorization) number are required before we will accept the board. Please contact Rastergraf at +1 541-923-5530, or support@rastergraf.com, for an RMA number.

1. A *non-refundable* \$350 analysis fee will be applied to the fixed cost of repair for all boards, according to the following chart

Part Numbers	Test and Analyze (US\$)	Test, Analyze & Repair (US\$)
VCD-V, VCL-V/8/X10, VCL-V/8/X12, VCL-V/8/X16, VCU-V/X12, VCU-V/X16	\$350	\$950
VCL-V/24/X12, VCT-VX12 (Non-Telos)	\$350	\$1,250
VCT-V/X12 (Telos)	\$350	\$1,500
VCL-M (all)	\$350	\$950

2. Even if no problem is found with the board, the \$350 charge still applies. If the same board is subsequently returned for analysis, a second \$350 fee will be waived.
3. Boards will be repaired if the circuit board is not excessively damaged and parts are available.
4. Conformally-coated boards: an additional \$500 per board charge will apply for repair of conformally coated boards and subsequent re-coating.
4. Special testing: an additional \$300 per board charge will apply for extended voltage and/or temperature testing of boards after repair.
5. Repaired boards will have a six-month warranty on the repaired component(s).

PLEASE NOTE:

- **Rastergraf CANNOT guarantee how long it will be able to repair these boards.**
- Depending upon how critical these boards are to your or your customer's application, and how long these boards are expected to remain in operation, we strongly recommend you stock suitable spares.
- Software support for these boards will be minimal. Old software will not be upgraded to new operating system releases.

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