Subj: BRAND NAME MEMORANDUM TO ACQUIRE NEW WAVE DESIGN BRAND FIBER CHANNEL FPGA CARDS

1. Identification of the agency and the contracting activity, and specific identification of the document as a "Brand Name Justification."

This is a brand name justification. Contracting activity is the Naval Sea Systems Command, Naval Surface Warfare Center, Panama City Division (NSWC PCD), 110 Vernon Avenue, Panama City, FL 32407-7001.

2. Nature and/or description of the action being approved.

This action will award a purchase order, on a brand name basis, to acquire New Wave Design, brand Switched Mezzanine Cards (XMC) Field Programmable Gate Array (FPGA) cards with fiber optic front panel ports. The XMC cards will be delivered in PCIe form-factor via carrier card.

3. A description of the supplies or services required to meet the agency's needs.

The following item is being acquired:

Item	Description	Qty
V1151 XMC FPGA Card (Part Number 400-01151-10-24-PE)	1 optical front panel port, AMD UltraScale KU095 XCKU095-2FFVC1517I, no external memory, VITA 42 mezzanine connectors, P14 not populated, commercial temp, includes optical transceiver, includes 1.0625 and 2.125 Gb/s Fibre Channel Upper Layer Protocol (IPFC) IP core with PCIe interface, Windows IPFC software driver, XMC card delivered in PCIe form-factor via carrier card	3

The Government's minimum needs have been verified by the certifying technical and requirements personnel. This memo does not authorize acquisition for other requirements. This acquisition will be conducted using simplified acquisition procedures with a total dollar value above micro-purchase levels, but not exceeding the simplified acquisition threshold. This memo does not authorize acquisition for other requirements.

4. Identification of the justification rationale and, if applicable, a demonstration of the proposed contractor's unique qualifications to provide the required supply or service. Authority: FAR 6.103-1(d), Application for brand-name descriptions

Pursuant to FAR 6.103-1(d) New Wave Design is the only brand of cards that will meet the Government's needs for the following reasons. New Wave Design is the original equipment manufacturer of the XMC FPGA card with a fiber optic front panel used in the ALMDS system. The fiber optic connection is required for communication between the ALMDS pod, maintenance laptop, and the MH-60S Common Console. Redesigning a replacement card would require a comprehensive and costly re-engineering effort consisting of:

- Extensive environmental, shock, and vibration testing to ensure the new component survives the SSC operational environment
- Developing equivalent FPGA intellectual property, design of a new printed circuit board, manufacture of board, and debugging/troubleshooting.
- Re-writing and re-verifying the software to interpret the electrical characteristics of a different card.
- Updates to all technical manuals, provisioning data, and maintenance procedures.

Engineering estimates put redesign costs at which exceed the program's cost and schedule for this effort. The use of alternate equipment may introduce new or change existing parameters that could damage or affect the proper operation of the ALMDS system. New Wave Design has been tested for form, fit, and function within the ALMDS design and is the only equipment that will meet the requirements for the ALMDS system. Use of alternate

equipment would still require extensive testing and incur added expense and time.
Therefore, it is imperative that New Wave Design brand cards are acquired.

5. A determination by the ordering activity contracting officer that the order represents the best value consistent with FAR 12.203.

Prior to award, the Contracting Officer will determine that the resulting order represents the best value and results in the lowest overall cost alternative (considering technical, price, and past performance) to meet the Government's needs.

6. A description of the market research conducted among schedule holders and the results or a statement of the reason market research was not conducted.

For the reasons specified in paragraph 4 above, New Wave Design is the only brand of equipment that can meet the Government's needs. Additionally, this contract action will be advertised in the Government Point of Entry Website SAM.gov.

7. Any other facts supporting the justification.

None.

8. A statement of the actions, if any, the agency may take to remove or overcome any barriers that led to the restricted consideration before any subsequent acquisition for the supplies or services is made.

For the reasons specified in paragraph 4 above, New Wave Design is the only brand of equipment that can meet the Government's needs.