



To whom it may concern,

The following letter summarizes the non-volatile memory status of Lattice programming cables

HW-DLN-3C

- Contains no non-volatile memory devices

HW-USBN-2A

- Includes an I2C EE PROM used to store the USB ID for plug-and-play support as required for operation of the USB interface. This is a 64Kbit EEPROM Memory, such as the Microchip 24LC64, or equivalent. This I2C EE PROM memory is not on the user data path.

HW-USBN-2B

- Includes an IE2C EE PROM used to store the USB ID for plug-and-play support as required for operations of the USB interface. This is a 1Kbit memory such as the STMicroelectronics M93C46 or equivalent. This memory is not on the user data path.
- Includes a Lattice MachXO2 FPGA (LCMXO2-1200). This device includes 34 kBytes of internal non-volatile Flash memory used to store its default configuration image. This memory is not on the user data path.
- Includes a Lattice ispPAC-POWR607. This device includes 622 bytes of internal non-volatile Flash memory used to store its default configuration image (plus an optional user-defined encryption key, which is not used in the HW-USBN-2B). This memory is not on the user data path.
- Includes a 4Mbit Flash memory such as the Atmel AT25DF041A or equivalent. This is used to store an alternate configuration image for operation of the local MachXO2 FPGA. This memory is not on the user data path.

A handwritten signature in black ink, appearing to read "Jonathan Ley", with a checkmark-like flourish at the end.

Jonathan Ley
+1-503-268-8633
jonathan.ley@lsc.com
Hardware Product Manager
Lattice Semiconductor Corporation
Hillsboro, Oregon USA