Frequency Control University

**Purpose**
Vectron Frequency Control University (FCU) is designed to provide both commercial and technical personnel with a comprehensive overview of the manufacturing process for crystals, crystal oscillators (clocks, VCXOs, TCXOs, OCXOs, VCSOs), crystal filters, SAW filters and oscillator based modules. A technical and applications overview of frequency control products will also be presented. As the focus is product technology training, we will use our frequency control components for training examples where necessary, though there will be no sales pitch for Vectron products.

**Registration**
The training session is free and you will be provided with a soft copy of all reference material required. To reserve your place, or to request any additional information, please contact Shiraz Vakharia at (717) 486-2138, or email at svakharia@vectron.com.

**Accommodations**
There are three recommended local hotels. Be sure to ask for the Vectron rate.

- **Country Inn & Suites**
  1529 Commerce Avenue
  Carlisle, PA 17015
  717-241-4900

- **Fairfield Inn and Suites – Carlisle**
  1528 Commerce Avenue
  Carlisle, PA 17015
  717-243-2080

- **Comfort Suites**
  10 S. Hanover St.
  Carlisle, PA 17013
  (717) 960-1000

**About Vectron International**
Vectron is the preferred technology partner for Frequency Control, Sensor, and Hybrid Product Solutions. We help customers "Innovate, Improve and Grow" their businesses. Vectron International is both a product manufacturer and a solutions provider, leading with its unique technology but always prepared to design and engineer custom solutions, where required.

**Locations**
Vectron Frequency Control University is held at our manufacturing facility in Mount Holly Springs, PA. Vectron’s headquarters is located in Hudson, NH and we have additional manufacturing facilities in Cincinnati, OH; Neckarbischofsheim, Germany; and Teltow, Germany.

**Our Technology**
Vectron International is a world leader in the design, manufacture and marketing of Frequency Control, Sensor, and Hybrid Product solutions using the very latest techniques in both bulk acoustic wave (BAW) and surface acoustic wave (SAW) based designs from DC to microwave frequencies. Products include crystals and crystal oscillators; frequency translators; clock and data recovery products; SAW filters and components used in telecommunications, data communications, frequency synthesizers, timing, navigation, military, aerospace and instrumentation systems.
Our Markets
Applications for Vectron International's products include mobile communications, wireline communication equipment, test instrumentation, satellite communications, military, space, and other applications where precision timing is required.

Our Products
Crystal clock oscillators (PXO)
Voltage Controlled Crystal Oscillators (VCXO)
Temperature Compensated Crystal Oscillators (TCXO)
Oven Controlled Crystal Oscillators (OCXO)
Evacuated Miniature Crystal Oscillators (EMXO)
Precision Custom Timing Modules
Surface Acoustic Wave Oscillators (SOs/VCSO)
Frequency Translator Products (FX)
SAW Filters
Quartz crystals, resonators and filters

Our Customers
Vectron International has strategic partnerships with key OEM manufacturers and offers standard products for a broad range of technologies and markets. Customers are served by regional sales offices and a world-wide network of sales representatives.

Location of the Mt Holly Springs Facility
Airport proximity to our Mount Holly Springs facility:
Harrisburg (MDT) is located approximately 30 minutes away.
Baltimore (BWI) is about 90 minutes away.
Washington Dulles (IAD), Regan National (DCA) & Philadelphia (PHL) are all 2 hours away.

Vectron International
100 Watts St.
Mt Holly Springs, PA, 17065

Participants should arrive on Monday as the sessions will start at 8:15am on Tuesday morning. Lunches will be provided during the training on Tuesday and Wednesday and dinner will be provided on Tuesday evening. The training will end at 2:30 on Wednesday so return flight plans can be made based on the travel time to the airports listed above.