Follow the below mentioned steps to use the “Binary Pulse Mode” feature, which produces a Pulse signal every time the DAC data rolls over.

1. The “Binary Pulse Mode” feature is available with the latest version of HSDC Pro v5.14, so kindly install the same. The installer of the HSDC Pro v5.14 can be found be downloaded from the following link: https://txn.box.com/s/clw4awb918wt80s7yp4lamcdfqz6yqbb

2.       We modified the existing “DAC3xJ84\_LMF\_442” INI of the TSW14J56revE board as “DAC3XJ84\_LMF\_442\_BinaryPulseMode”(attached) to utilize the “Binary Pulse Mode” feature. Kindly place this updated “DAC3XJ84\_LMF\_442\_BinaryPulseMode” INI file inside the folder: [HSDC Pro Installation Location]\14J57revE Details\DAC files

Default Location : [C:\Program Files (x86)\Texas Instruments\High Speed Data Converter Pro\14J57revE Details\DAC files](file:///C:\Program%20Files%20(x86)\Texas%20Instruments\High%20Speed%20Data%20Converter%20Pro\14J57revE%20Details\DAC%20files)

3.       After the doing the above-mentioned steps open the HSDC Pro v5.14 application, then connect to the TSW14J57revE board and switch to DAC tab and then select the “DAC3XJ84\_LMF\_442\_BinaryPulseMode” instead of “DAC3xJ84\_LMF\_442” in the dropdown.

4.       Provide the necessary inputs like Data rate, DAC Pattern and then click “Send”.

Enabling the “Binary Pulse Mode” feature will generate a pulse at “TRIG OUT C” SMA Pin every time the DAC data wraps around in playback (rolls over).

Added\Modified the following parameters of the existing “DAC3xJ84\_LMF\_442” INI for using the ”Binary Pulse Mode” feature,

1.       Changed the Interface name to "TSW14J57revE\_16L\_DDR\_XCVR\_FIRMWARE", as this Firmware supports the “Binary Pulse Mode” feature.

1. “Binary Pulse Mode = 1”, to enable this “Binary Pulse Mode” feature
2. “Binary Pulse Start Index = 0”, to point to sample index during which the pulse has to rise. 0 <= value < Samples per Channel entered in HSDC Pro
3. “Binary Pulse Width = 512”, defines the number of sample period up to which the pulse has to be high. 0 <= value < Samples per Channel entered in HSDC Pro

The value of the “Binary Pulse Start Index” and “Binary Pulse Width” INI parameter will decide the start and width of the pulse generated respectively. For above-mentioned configuration the pulse rises from low to high at 0th sample and stays high until 512th sample, then falls back to low and stays low until the 0th sample of next DAC data rolls over.