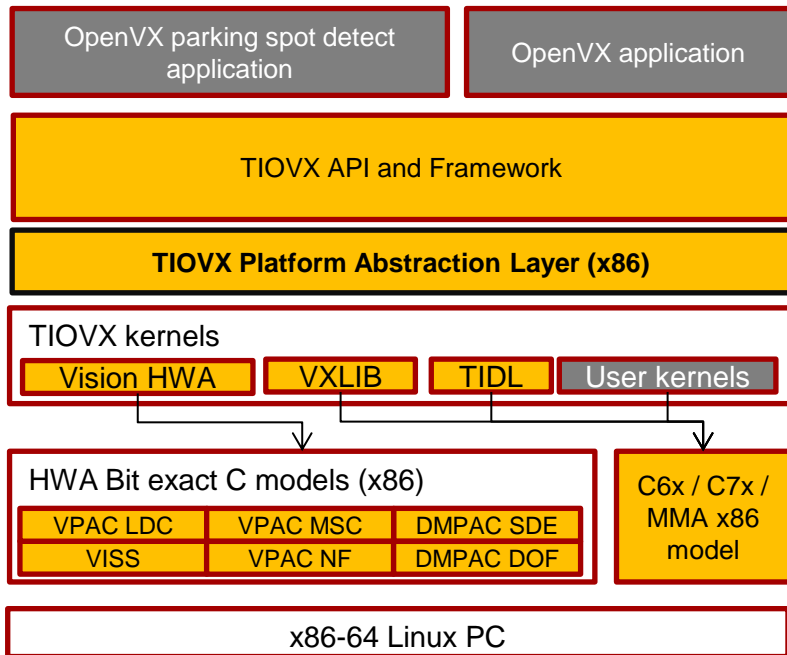


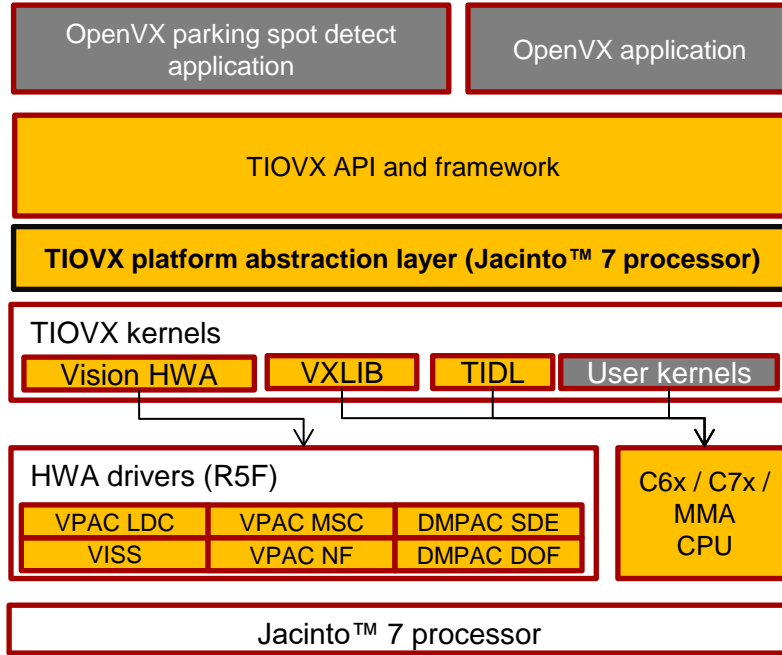
# TI OpenVX™ (TIOVX): Ease of use tools

# OpenVX™ application development flow

## PC emulation platform



## Jacinto™ 7 processors target platform



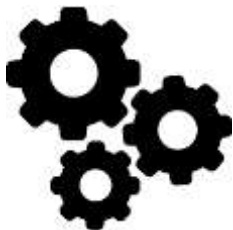
- Develop and test application on x86 PC
- Run on SoC / EVM without modifications



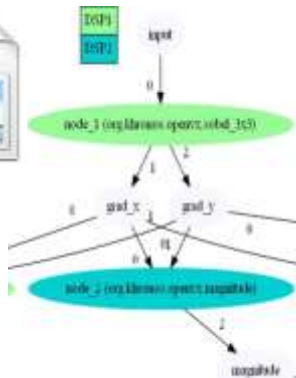
# PyTIOVX - automated OpenVX “C” code generation



Python script using  
PyTIOVX objects



PyTIOVX



OpenVX code

- Generated C code can run on SoC without modifications
- Visualize kernel interface
- Trap and fix common mistakes before executing on target SoC

# PyTIOVX – code generation introduction

- Provides a simple Python-based API for generating OpenVX kernel wrappers
- Generates significant amount of OpenVX code per amount of Python code:
  - Kernel wrapper: 9 lines of Python code = 650+ lines of OpenVX code
- Advantages:
  - Minimize amount of boilerplate code to be hand-written
  - Error checking provided
- The PyTIOVX generated code details:
  - Code will compile without errors (as long as list of “Developer TODO’s” are addressed)
  - Designed with MISRA-C compliance in mind

# For more information

- Jacinto 7 Processor SDK Automotive download:  
<http://www.ti.com/tool/PROCESSOR-SDK-JACINTO-DRA8X-TDA4X>
- Processor SDK Linux Automotive (PSDKLA) user guide:  
[#{PSDKLA\\_INSTALL\\_PATH}/docs/linux/index.html](http://www.ti.com/tool/PROCESSOR-SDK-LINUX-AUTOMOTIVE-PSDKLA-USER-GUIDE)
- Processor SDK RTOS Automotive (PSDKRA) user guide:  
[#{PSDKRA\\_INSTALL\\_PATH}/index.html](http://www.ti.com/tool/PROCESSOR-SDK-RTOS-AUTOMOTIVE-PSDKRA-USER-GUIDE)
- For additional questions, refer to the E2E community forums:  
<https://e2e.ti.com/support/processors/f/791>



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