

### Kernel Implementation Details

- kernels specific constraints
- performance equations

### NN,Layer Description

- layer type (Conv/FC/MaxPool/..)
- layer dims.  $\langle H, W, C, N, K \rangle$
- Batch Size, Padding, Stride

### Analytical Model and DSE

memory access  
estimation

performance  
estimation

NN Specific

CNN

LSTM

.....

SOM

### Output

- Tiling parameters  $\langle T_r, T_c, T_n, T_m \rangle$
- Scheduling Scheme
- MAC efficiency, Memory Access

### Architecture Parameters

- Shared on-chip buffer size
- Bus-Width
- PE array layout (PxQ)
- PE architecture details