

```

__global__ void convolution_1D_ba_sic_kernel(float *N, float *P, int Mask_Width,
int Width) {

int i = blockIdx.x*blockDim.x + threadIdx.x;

float Pvalue = 0;
int N_start_point = i - (Mask_Width/2);
for (int j = 0; j < Mask_Width; j++) {
    if (N_start_point + j >= 0 && N_start_point + j < Width) {
        Pvalue += N[N_start_point + j]*M[j];
    }
}
P[i] = Pvalue;
}

```