

Compute_kernel

```
For( i = 0; i < numX; i++)
```

```
For( k = 0; k < numK; k ++)
```

```
expArg = 2  $\pi$  * (kx[k] * x[i] + ky[k] * y[i] + kz[k] * z[i])
```

```
cosArg = cos( expArg );
```

```
sinArg = sin( expArg );
```

```
phiMag =  $\text{phiR}[k]^2 + \text{phiI}[k]^2$ 
```

```
Qracc += phiMag * cosArg
```

```
Qiacc += phiMag * sinArg
```

```
Qr[i] = Qracc
```

```
Qi[i] = Qiacc
```

kx
ky
kz
phiR
phiI

x
y
z

Qr
Qi