```
%8:
 %mul.i.i = shl i64 %5, 5
 %mul3.i.i = shl i64 %6, 3
 %sub.i = add nsw i32 %2, -1, !llvm.access.group !12
 %sub4.i = add nsw i32 %3, -1
 br label %pregion_for_entry.pregion_for_init.i
```

```
pregion_for_entry.pregion_for_init.i:
 %_local_id_y.0 = phi i64 [ 0, %8 ], [ %26, %pregion_for_end.i ]
 %add6.i.i = add nuw nsw i64 %_local_id_y.0, %mul3.i.i, !llvm.access.group !12
 %conv2.i = trunc i64 %add6.i.i to i32, !llvm.access.group !12
 %cmp.i = icmp sgt i32 %sub.i, %conv2.i, !llvm.access.group !12
 %cmp8.i = icmp sgt i32 %conv2.i, 0
 %sub13.i = add nsw i32 %conv2.i, -1
 %mul.i = mul nsw i32 %sub13.i, %3
 %mul31.i = mul nsw i32 %conv2.i, %3
 %add51.i = add nuw nsw i32 %conv2.i, 1
 %mul52.i = mul nsw i32 %add51.i, %3
 br label %pregion_for_entry.entry.i
```

```
pregion_for_entry.entry.i:
 %_local_id_x.0 = phi i64 [ 0, %pregion_for_entry.pregion_for_init.i ], [
... %27, %if.end.i ]
 %add1.i.i = add nuw nsw i64 %_local_id_x.0, %mul.i.i, !llvm.access.group !12
 %conv.i = trunc i64 %add1.i.i to i32, !llvm.access.group !12
 br i1 %cmp.i, label %land.lhs.true.i, label %if.end.i, !llvm.access.group !12
```

```
land.lhs.true.i:
 %cmp5.i = icmp sgt i32 %sub4.i, %conv.i, !llvm.access.group !12
 %or.cond.i = and i1 %cmp8.i, %cmp5.i, !llvm.access.group !12
 %cmp11.i = icmp sgt i32 %conv.i, 0, !llvm.access.group !12
 %or.cond76.i = and i1 %cmp11.i, %or.cond.i, !llvm.access.group !12
 br i1 %or.cond76.i, label %if.then.i, label %if.end.i, !llvm.access.group !12
```

```
if.then.i:
 %sub14.i = add nsw i32 %conv.i, -1, !llvm.access.group !12
 %add.i = add nsw i32 %sub14.i, %mul.i, !llvm.access.group !12
 %idxprom.i = sext i32 %add.i to i64, !llvm.access.group !12
 %arrayidx.i = getelementptr inbounds float, float* %0, i64 %idxprom.i,
... !llvm.access.group !12
 %9 = load float, float* %arrayidx.i, align 4, !tbaa !15, !llvm.access.group
... !12
 %add19.i = add nsw i32 %mul.i, %conv.i, !llvm.access.group !12
 %idxprom20.i = sext i32 %add19.i to i64, !llvm.access.group !12
 %arrayidx21.i = getelementptr inbounds float, float* %0, i64 %idxprom20.i,
... !llvm.access.group !12
 %10 = load float, float* %arrayidx21.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %mul22.i = fmul float %10, 5.000000e-01, !llvm.access.group !12
 %11 = tail call float @llvm.fmuladd.f32(float %9, float 0x3FC99999A0000000,
... float %mul22.i) #3, !llvm.access.group !12
 %add25.i = add nuw nsw i32 %conv.i, 1, !llvm.access.group !12
 %add26.i = add nsw i32 %add25.i, %mul.i, !llvm.access.group !12
 %idxprom27.i = sext i32 %add26.i to i64, !llvm.access.group !12
 %arrayidx28.i = getelementptr inbounds float, float* %0, i64 %idxprom27.i,
... !llvm.access.group !12
 %12 = load float, float* %arrayidx28.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %13 = tail call float @llvm.fmuladd.f32(float %12, float 0xBFE99999A0000000,
... float %11) #3, !llvm.access.group !12
 %add33.i = add nsw i32 %sub14.i, %mul31.i, !llvm.access.group !12
 %idxprom34.i = sext i32 %add33.i to i64, !llvm.access.group !12
 %arrayidx35.i = getelementptr inbounds float, float* %0, i64 %idxprom34.i,
... !llvm.access.group !12
 %14 = load float, float* %arrayidx35.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %15 = tail call float @llvm.fmuladd.f32(float %14, float 0xBFD3333340000000,
... float %13) #3, !llvm.access.group !12
 %add40.i = add nsw i32 %mul31.i, %conv.i, !llvm.access.group !12
 %idxprom41.i = sext i32 %add40.i to i64, !llvm.access.group !12
 %arrayidx42.i = getelementptr inbounds float, float* %0, i64 %idxprom41.i,
... !llvm.access.group !12
 %16 = load float, float* %arrayidx42.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %17 = tail call float @llvm.fmuladd.f32(float %16, float 0x3FE3333340000000,
... float %15) #3, !llvm.access.group !12
 %add47.i = add nsw i32 %add25.i, %mul31.i, !llvm.access.group !12
 %idxprom48.i = sext i32 %add47.i to i64, !llvm.access.group !12
 %arrayidx49.i = getelementptr inbounds float, float* %0, i64 %idxprom48.i,
... !llvm.access.group !12
 %18 = load float, float* %arrayidx49.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %19 = tail call float @llvm.fmuladd.f32(float %18, float 0xBFECCCCCC0000000,
... float %17) #3, !llvm.access.group !12
 %add54.i = add nsw i32 %sub14.i, %mul52.i, !llvm.access.group !12
 %idxprom55.i = sext i32 %add54.i to i64, !llvm.access.group !12
 %arrayidx56.i = getelementptr inbounds float, float* %0, i64 %idxprom55.i,
... !llvm.access.group !12
 %20 = load float, float* %arrayidx56.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %21 = tail call float @llvm.fmuladd.f32(float %20, float 0x3FD99999A0000000,
... float %19) #3, !llvm.access.group !12
 %add61.i = add nsw i32 %mul52.i, %conv.i, !llvm.access.group !12
 %idxprom62.i = sext i32 %add61.i to i64, !llvm.access.group !12
 %arrayidx63.i = getelementptr inbounds float, float* %0, i64 %idxprom62.i,
... !llvm.access.group !12
 %22 = load float, float* %arrayidx63.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %23 = tail call float @llvm.fmuladd.f32(float %22, float 0x3FE6666660000000,
... float %21) #3, !llvm.access.group !12
 %add68.i = add nsw i32 %add25.i, %mul52.i, !llvm.access.group !12
 %idxprom69.i = sext i32 %add68.i to i64, !llvm.access.group !12
 %arrayidx70.i = getelementptr inbounds float, float* %0, i64 %idxprom69.i,
... !llvm.access.group !12
 %24 = load float, float* %arrayidx70.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %25 = tail call float @llvm.fmuladd.f32(float %24, float 0x3FB99999A0000000,
... float %23) #3, !llvm.access.group !12
 %arrayidx75.i = getelementptr inbounds float, float* %1, i64 %idxprom41.i,
... !llvm.access.group !12
 store float %25, float* %arrayidx75.i, align 4, !tbaa !15,
... !llvm.access.group !12
 br label %if.end.i, !llvm.access.group !12
```

```
if.end.i:
 %27 = add nuw nsw i64 %_local_id_x.0, 1
 %exitcond.not = icmp eq i64 %27, 32
 br i1 %exitcond.not, label %pregion_for_end.i, label
... %pregion_for_entry.entry.i, !llvm.loop !22
```

```
pregion_for_end.i:
 %26 = add nuw nsw i64 %_local_id_y.0, 1
 %exitcond1.not = icmp eq i64 %26, 8
 br i1 %exitcond1.not, label %Convolution2D_kernel.exit, label
... %pregion_for_entry.pregion_for_init.i, !llvm.loop !19
```

```
Convolution2D_kernel.exit:
 ret void
```

CFG for '_pocl_kernel_Convolution2D_kernel' function