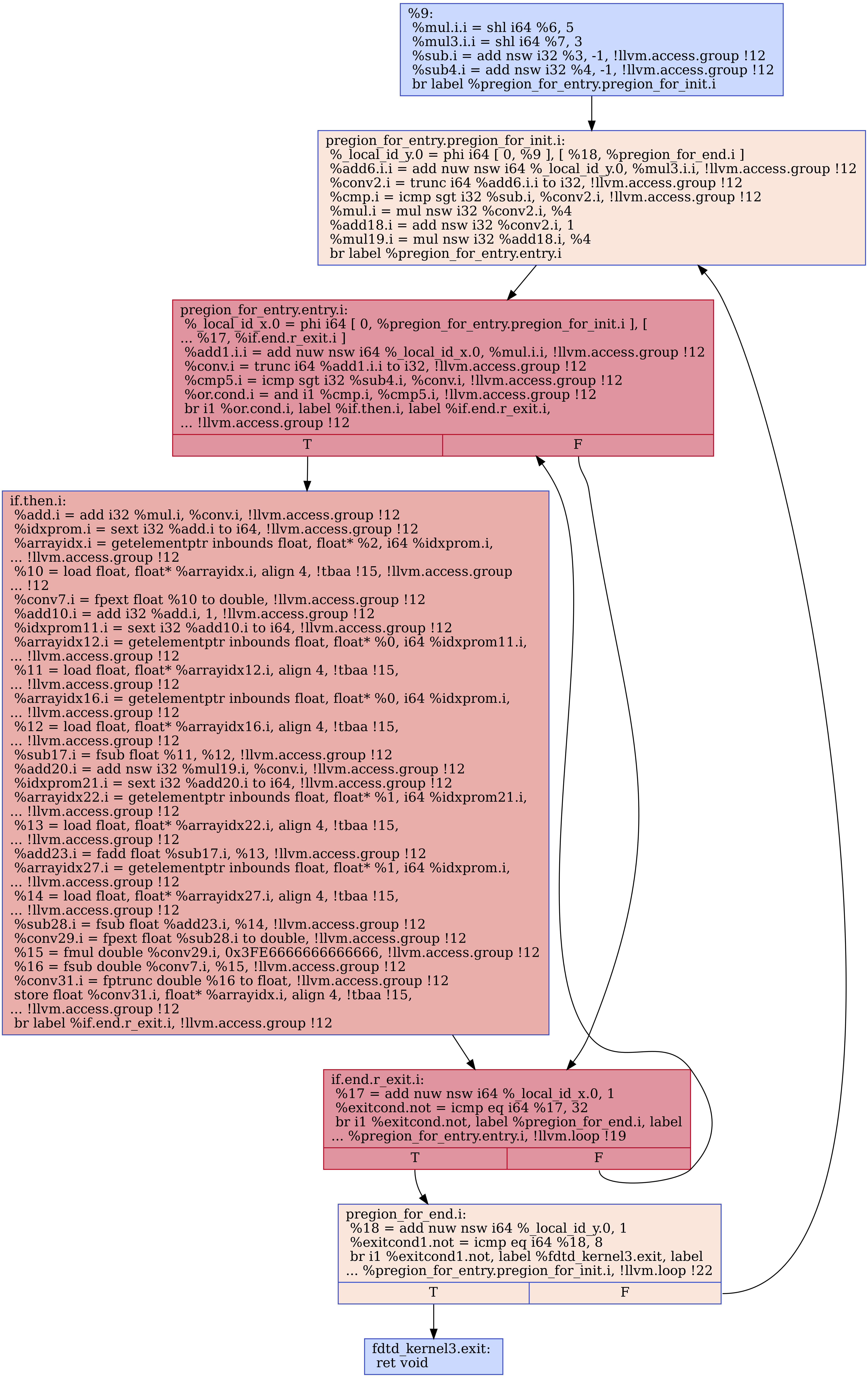

```
%9:
 %mul.i.i = shl i64 %6, 5
 %mul3.i.i = shl i64 %7, 3
 %sub.i = add nsw i32 %3, -1, !llvm.access.group !12
 %sub4.i = add nsw i32 %4, -1, !llvm.access.group !12
 br label %pregion_for_entry.pregion_for_init.i
```

```
pregion_for_entry.pregion_for_init.i:
 %_local_id_y.0 = phi i64 [ 0, %9 ], [ %18, %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
 %mul.i = mul nsw i32 %conv2.i, %4
 %add18.i = add nsw i32 %conv2.i, 1
 %mul19.i = mul nsw i32 %add18.i, %4
 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 ], [
... %17, %if.end.r_exit.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
 %cmp5.i = icmp sgt i32 %sub4.i, %conv.i, !llvm.access.group !12
 %or.cond.i = and i1 %cmp.i, %cmp5.i, !llvm.access.group !12
 br i1 %or.cond.i, label %if.then.i, label %if.end.r_exit.i,
... !llvm.access.group !12
```

```
if.then.i:
 %add.i = add i32 %mul.i, %conv.i, !llvm.access.group !12
 %idxprom.i = sext i32 %add.i to i64, !llvm.access.group !12
 %arrayidx.i = getelementptr inbounds float, float* %2, i64 %idxprom.i,
... !llvm.access.group !12
 %10 = load float, float* %arrayidx.i, align 4, !tbaa !15, !llvm.access.group
... !12
 %conv7.i = fpext float %10 to double, !llvm.access.group !12
 %add10.i = add i32 %add.i, 1, !llvm.access.group !12
 %idxprom11.i = sext i32 %add10.i to i64, !llvm.access.group !12
 %arrayidx12.i = getelementptr inbounds float, float* %0, i64 %idxprom11.i,
... !llvm.access.group !12
 %11 = load float, float* %arrayidx12.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %arrayidx16.i = getelementptr inbounds float, float* %0, i64 %idxprom.i,
... !llvm.access.group !12
 %12 = load float, float* %arrayidx16.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %sub17.i = fsub float %11, %12, !llvm.access.group !12
 %add20.i = add nsw i32 %mul19.i, %conv.i, !llvm.access.group !12
 %idxprom21.i = sext i32 %add20.i to i64, !llvm.access.group !12
 %arrayidx22.i = getelementptr inbounds float, float* %1, i64 %idxprom21.i,
... !llvm.access.group !12
 %13 = load float, float* %arrayidx22.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %add23.i = fadd float %sub17.i, %13, !llvm.access.group !12
 %arrayidx27.i = getelementptr inbounds float, float* %1, i64 %idxprom.i,
... !llvm.access.group !12
 %14 = load float, float* %arrayidx27.i, align 4, !tbaa !15,
... !llvm.access.group !12
 %sub28.i = fsub float %add23.i, %14, !llvm.access.group !12
 %conv29.i = fpext float %sub28.i to double, !llvm.access.group !12
 %15 = fmul double %conv29.i, 0x3FE6666666666666, !llvm.access.group !12
 %16 = fsub double %conv7.i, %15, !llvm.access.group !12
 %conv31.i = fptrunc double %16 to float, !llvm.access.group !12
 store float %conv31.i, float* %arrayidx.i, align 4, !tbaa !15,
... !llvm.access.group !12
 br label %if.end.r_exit.i, !llvm.access.group !12
```

```
if.end.r_exit.i:
 %17 = add nuw nsw i64 %_local_id_x.0, 1
 %exitcond.not = icmp eq i64 %17, 32
 br i1 %exitcond.not, label %pregion_for_end.i, label
... %pregion_for_entry.entry.i, !llvm.loop !19
```

```
pregion_for_end.i:
 %18 = add nuw nsw i64 %_local_id_y.0, 1
 %exitcond1.not = icmp eq i64 %18, 8
 br i1 %exitcond1.not, label %fdtd_kernel3.exit, label
... %pregion_for_entry.pregion_for_init.i, !llvm.loop !22
```

```
fdtd_kernel3.exit:
 ret void
```

CFG for '_pocl_kernel_fdtd_kernel3' function