```
%8:
                                           %mul.i.i = shl i64 %5, 5
                                           %cmp218.i = icmp sgt i32 %3, 0, !llvm.access.group !12
                                           \%9 = \text{zext i} 32 \% 3 \text{ to i} 64
                                           br label %pregion for entry.entry.i
                                pregion for entry.entry.i:
                                % local id x.0 = phi i64 [0, %8], [%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
                                %cmp.i = icmp slt i32 %conv.i, %3, !llvm.access.group !12
                                %or.cond.i = and i1 %cmp218.i, %cmp.i, !llvm.access.group !12
                                 br i1 %or.cond.i, label %for.body.lr.ph.i, label %if.end.r exit.i,
                                ...!llvm.access.group!12
                                                                                             F
   for.body.lr.ph.i:
    %sext.i = shl i64 %add1.i.i, 32, !llvm.access.group !12
    %idxprom7.i = ashr exact i64 %sext.i, 32, !llvm.access.group !12
    %arrayidx8.i = getelementptr inbounds float, float* %1, i64 %idxprom7.i,
    ...!llvm.access.group!12
    %.pre.i = load float, float* %arrayidx8.i, align 4, !tbaa !14,
    ...!llvm.access.group!12
    br label %for.body.i, !llvm.access.group !12
for.bodv.i:
%indvars.iv.next.i2 = phi i64 [ %indvars.iv.next.i, %for.body.i ], [ 0,
... %for.body.lr.ph.i ]
%10 = phi float [ %16, %for.body.i ], [ %.pre.i, %for.body.lr.ph.i ]
%11 = mul nuw nsw i64 %indvars.iv.next.i2, %9, !llvm.access.group !12
%12 = add nsw i64 %11, %idxprom7.i, !llvm.access.group !12
%arrayidx.i = getelementptr inbounds float, float* %0, i64 %12,
...!llvm.access.group!12
%13 = load float, float* %arrayidx.i, align 4, !tbaa !14, !llvm.access.group
... !12
%arrayidx5.i = getelementptr inbounds float, float* %2, i64
... %indvars.iv.next.i2, !llvm.access.group !12
%14 = load float, float* %arrayidx5.i, align 4, !tbaa !14,
...!llvm.access.group!12
%15 = fmul float %13, %14, !llvm.access.group !12
%16 = fadd float %10, %15, !llvm.access.group !12
store float %16, float* %arrayidx8.i, align 4, !tbaa !14, !llvm.access.group
... !12
%indvars.iv.next.i = add nuw nsw i64 %indvars.iv.next.i2, 1,
...!llvm.access.group!12
%exitcond.not.i = icmp eq i64 %indvars.iv.next.i, %9, !llvm.access.group !12
br i1 %exitcond.not.i, label %if.end.r exit.i.loopexit, label %for.body.i,
...!llvm.loop!18,!llvm.access.group 12
                  T
                                                            \mathbf{F}
                                if.end.r exit.i.loopexit:
                                 br label %if.end.r exit.i
                                               if.end.r exit.i:
                                                %17 = add nuw nsw i64 \% local id x.0, 1
                                                %exitcond.not = icmp eq i\overline{6}4 %17, \overline{3}2
                                               br i1 %exitcond.not, label %mvt kernel2.exit, label
                                               ... %pregion for entry.entry.i, !llvm.loop !20
                                                  mvt kernel2.exit:
                                                   ret void
```

CFG for 'pocl kernel mvt kernel2' function