%9: %mul.i.i = shl i64 %6, 5 %cmp217.i = icmp sgt i32 %4, 0 %wide.trip.count.i = zext i32 %4 to i64 br i1 %cmp217.i, label %pregion for entry.entry.i.us.preheader, label ... %atax kernel1.exit F pregion for entry.entry.i.us.preheader: br label %pregion for entry.entry.i.us pregion for entry.entry.i.us: % local id x.0.us = phi i64 [%23, %if.end.r exit.i.us.1], [0,... %pregion for entry.entry.i.us.preheader] %add1.i.i.u $\bar{s} = \bar{a}$ dd nuw nsw i64 % local id x.0.us, %mul.i.i %conv.i.us = trunc i64 %add1.i.i.us to i32 %cmp.i.us = icmp slt i32 %conv.i.us, %3 br i1 %cmp.i.us, label %for.body.lr.ph.i.us, label %if.end.r exit.i.us for.body.lr.ph.i.us: %mul.i.us = mul nsw i32 %conv.i.us, %4 %sext.i.us = shl i64 %add1.i.i.us, 32 %idxprom7.i.us = ashr exact i64 %sext.i.us, 32 %arrayidx8.i.us = getelementptr inbounds float, float* %2, i64 %idxprom7.i.us %10 = sext i32 %mul.i.us to i64 %.pre.i.us = load float, float* %arrayidx8.i.us, align 4, !tbaa !12 br label %for.body.i.us for.body.i.us: %indvars.iv.next.i2.us = phi i64 [%indvars.iv.next.i.us, %for.body.i.us], ... [0, %for.body.lr.ph.i.us] %11 = phi float [%15, %for.body.i.us], [%.pre.i.us, %for.body.lr.ph.i.us] %12 = add nsw i64 %indvars.iv.next.i2.us, %10 %arrayidx.i.us = getelementptr inbounds float, float* %0, i64 %12 %13 = load float, float* %arrayidx.i.us, align 4, !tbaa !12 %arrayidx5.i.us = getelementptr inbounds float, float* %1, i64 ... %indvars.iv.next.i2.us %14 = load float, float* %arrayidx5.i.us, align 4, !tbaa !12 %15 = tail call float @llvm.fmuladd.f32(float %13, float %14, float %11) #3 store float %15, float* %arrayidx8.i.us, align 4, !tbaa !12, ...!llvm.access.group!16 %indvars.iv.next.i.us = add nuw nsw i64 %indvars.iv.next.i2.us, 1 %exitcond.not.i.us = icmp eq i64 %indvars.iv.next.i.us, %wide.trip.count.i br i1 %exitcond.not.i.us, label %if.end.r exit.i.us.loopexit, label ... %for.body.i.us, !llvm.loop !18 Τ F if.end.r exit.i.us.loopexit: br label %if.end.r exit.i.us if.end.r exit.i.us: %16 = or i64 % local id x.0.us, 1%add1.i.i.us.1 = add nuw nsw i64 %16, %mul.i.i %conv.i.us.1 = trunc i64 %add1.i.i.us.1 to i32 %cmp.i.us.1 = icmp slt i32 %conv.i.us.1, %3 br i1 %cmp.i.us.1, label %for.body.lr.ph.i.us.1, label %if.end.r exit.i.us.1 Τ F for.body.lr.ph.i.us.1: %mul.i.us.1 = mul nsw i32 %conv.i.us.1, %4 %sext.i.us.1 = shl i64 %add1.i.i.us.1, 32 %idxprom7.i.us.1 = ashr exact i64 %sext.i.us.1, 32 %arrayidx8.i.us.1 = getelementptr inbounds float, float* %2, i64 ... %idxprom7.i.us.1 %17 = sext i32 %mul.i.us.1 to i64 %.pre.i.us.1 = load float, float* %arrayidx8.i.us.1, align 4, !tbaa !12 br label %for.body.i.us.1 for.body.i.us.1: %indvars.iv.next.i2.us.1 = phi i64 [%indvars.iv.next.i.us.1, ... %for.body.i.us.1], [0, %for.body.lr.ph.i.us.1] %18 = phi float [%22, %for.body.i.us.1], [%.pre.i.us.1, ... %for.body.lr.ph.i.us.1] %19 = add nsw i64 %indvars.iv.next.i2.us.1, %17 %arrayidx.i.us.1 = getelementptr inbounds float, float* %0, i64 %19 %20 = load float, float* %arrayidx.i.us.1, align 4, !tbaa !12 %arrayidx5.i.us.1 = getelementptr inbounds float, float* %1, i64 ... %indvars.iv.next.i2.us.1 %21 = load float, float* %arrayidx5.i.us.1, align 4, !tbaa !12 %22 = tail call float @llvm.fmuladd.f32(float %20, float %21, float %18) #3 store float %22, float* %arrayidx8.i.us.1, align 4, !tbaa !12, ...!llvm.access.group!16 %indvars.iv.next.i.us.1 = add nuw nsw i64 %indvars.iv.next.i2.us.1, 1 %exitcond.not.i.us.1 = icmp eq i64 %indvars.iv.next.i.us.1, ... %wide.trip.count.i br i1 %exitcond.not.i.us.1, label %if.end.r exit.i.us.1.loopexit, label ... %for.body.i.us.1, !llvm.loop !18 F if.end.r exit.i.us.1.loopexit: br label %if.end.r exit.i.us.1 if.end.r exit.i.us.1: %23 = add nuw nsw i64 % local id x.0.us, 2%exitcond.not.1 = icmp eq i64 %23, 32 br i1 %exitcond.not.1, label %atax kernel1.exit.loopexit, label ... %pregion for entry.entry.i.us, !llvm.loop!20 F atax_kernel1.exit.loopexit: br label %atax kernel1.exit atax_kernel1.exit: ret void