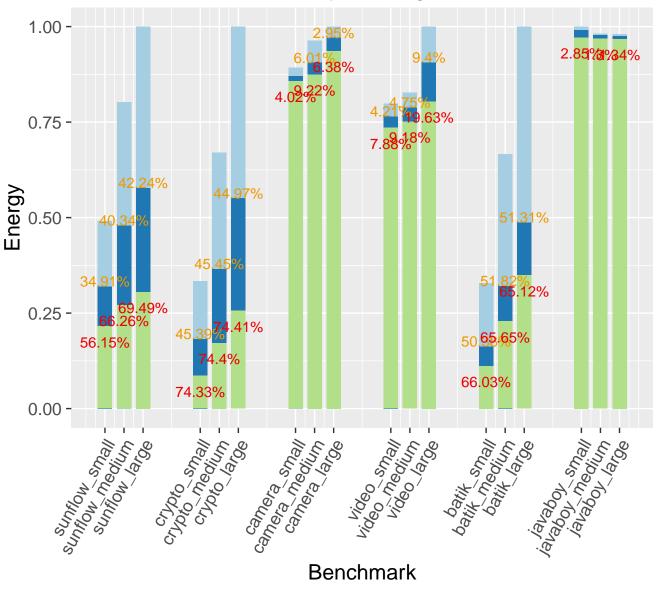Pi Battery Casing Runs