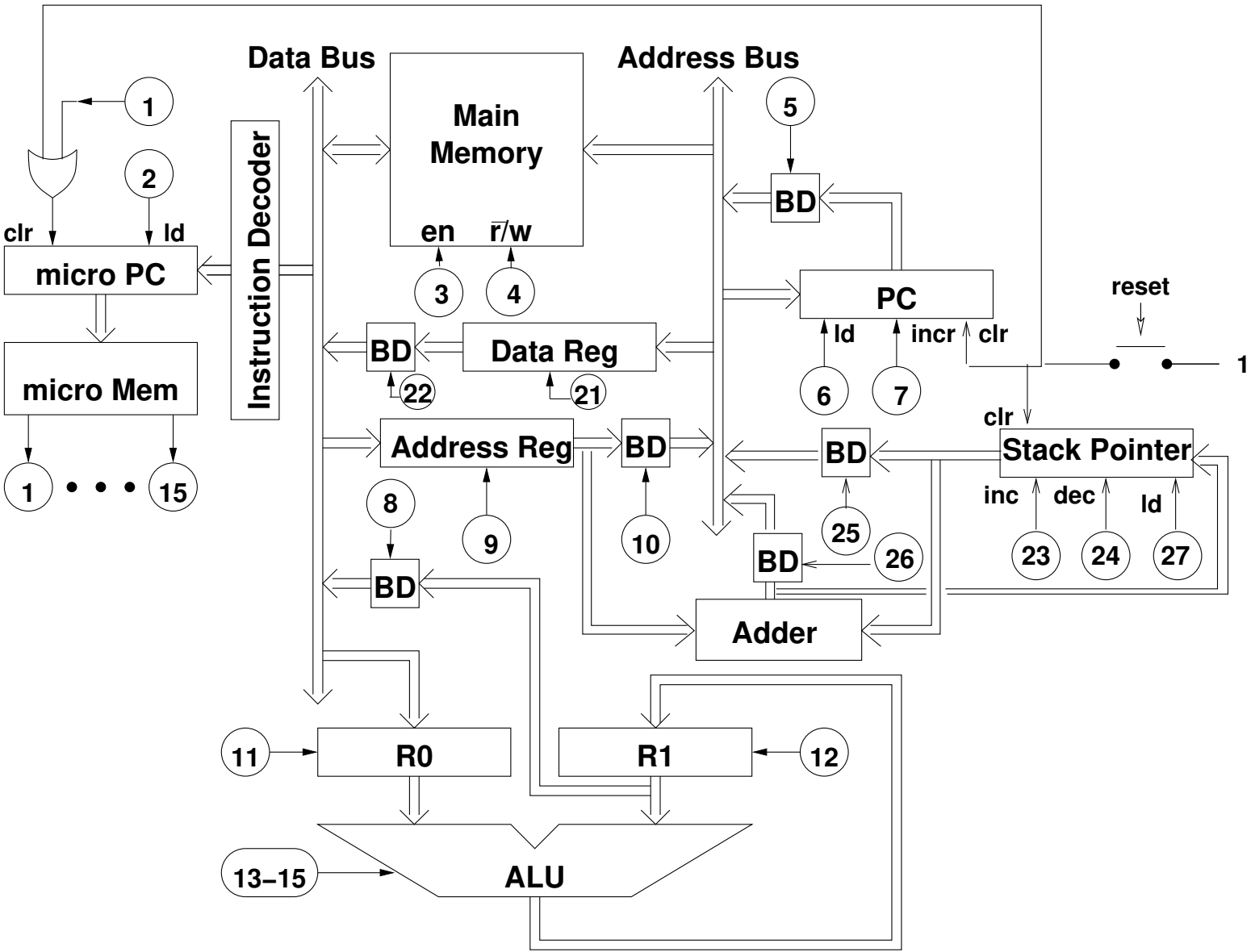Modifications pour l'arithétique de sp