

Assembly Language Conversion: GCPU to TI DSP

GCPU Instructions	Description	DSP Instructions	Description
LDAA #data LDAB #data	Load A or B with immediate data	MOV reg, #data Ex.: MOV AR5, #0xF Note: Use regs AR0-AR7 or AH/AL for the reg	Load the immediate value 'data' into the reg
LDAA addr LDAB addr	Load A or B with value at addr	MOV reg1, *reg2 Ex.: MOV AL, *AR1 Note: Use AH,AL,AR6,AR7 for reg1 and use AR0-AR5 for reg2	Load the value at the location in reg2 into reg1. The value in reg2 is the addr.
STAA addr STAB addr	Store data in B or A to memory location addr	MOV *reg1, reg2 Ex: MOV *AR1, AR2 Note: Use AR0-AR5 for reg1 and use AL/AH or AR0-AR7 for reg 2	Store the value in reg2 at the location in reg1. The value in reg1 is the addr
SUM_BA SUM_AB	Add the two registers together and store in A or B	ADD reg1, reg2 Ex: ADD AH, AR0 Note: Use AH/AL for reg1 and use AH/AL or AR0-AR7 for reg2	Add reg2 to reg1. reg1 = reg1 + reg2
AND_BA AND_AB	AND/OR the two regs together and store result in A or B	AND reg1, reg2 OR reg1, reg2 Ex: AND AL, AR1 Note: Use AH/AL for reg1 and use AH/AL or AR0-AR7 for reg2	AND/OR reg2 with reg1. Store result in reg1. reg1 = reg1 AND/OR reg2
COMA COMB	Complement the contents in register A or B	NOT reg Ex: NOT AR6 Note: Use AH/AL or AR0-AR7 for reg.	Complement the contents in the reg
SHFA_L SHFA_R	Shift the contents in register A left or right.	LSL reg, X LSR reg, X Ex: LSL AH, 3 Note: Use AH/AL for reg	Shift the contents in the reg X times
INX INY	Increment the contents in register X or Y	INC reg Ex: INC AR5 Note: Use AH/AL or AR0-AR7 for reg.	Increments the contents in the reg