

Instr.	funct7	funct3	opcode	Instr.	funct7	funct3	opcode
add	0000000	000	0110011	addi		000	0010011
sub	0100000	000	0110011				0010011
sll	0000000	001	0110011	slli	0000000	001	0010011
slt	0000000	010	0110011	slti		010	0010011
sltu	0000000	011	0110011	sltiu		011	0010011
xor	0000000	100	0110011	xori		100	0010011
srl	0000000	101	0110011	srli	0000000	101	0010011
sra	0100000	101	0110011	srai	0100000	101	0010011
or	0000000	110	0110011	ori		110	0010011
and	0000000	111	0110011	andi		111	0010011

Instr.	funct3	opcode	Instr.	funct3	opcode	Instr.	funct3	opcode
lb	000	0000011	sb	000	0100011	beq	000	1100011
lh	001	0000011	sh	001	0100011	bne	001	1100011
lw	010	0000011	sw	010	0100011			
lbu	100	0000011				blt	100	1100011
lhu	101	0000011				bge	101	1100011
						bltu	110	1100011
						bgeu	111	1100011

Instr.	funct3	opcode
auipc		0010111
lui		0110111
jalr	000	1100111
jal		1101111

#### CORE INSTRUCTION FORMATS

	31	27	26	25	24	20	19	15	14	12	11	7	6	0
R	funct7				rs2		rs1		funct3		rd		Opcode	
I	imm[11:0]						rs1		funct3		rd		Opcode	
S	imm[11:5]				rs2		rs1		funct3		imm[4:0]		opcode	
SB	imm[12 10:5]				rs2		rs1		funct3		imm[4:1 11]		opcode	
U	imm[31:12]										rd		opcode	
UJ	imm[20 10:11 19:12]										rd		opcode	

#### Registers:

x0	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10-x17	x18-x27	x28-x31
zero	ra	sp	gp	tp	t0	t1	t2	s0(fp)	s1	a0-a7	s2-s11	t3-t6

Part of ASCII table. Values are in hexadecimal. Space is 0x20 and '~' is 0x7E.

	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
0x20		!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/
0x30	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
0x40	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
0x50	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
0x60	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
0x70	p	q	r	s	t	u	v	w	x	y	z	{		}	~	