

## SEGMENT REGISTER ASSIGNMENTS:

Type of memory reference	Default segment	Alternate segment	Offset (Logical Address).
Instruction Fetch	CS	None	IP
Stack operation	SS	None	SP
General Data	DS	CS, ES, SS	Effective address.
String Source	DS	CS, ES, SS	SI
String Destination	ES	None	DI
BX used as pointer	DS	CS, ES, SS	Effective address.
BP used as pointer	SS	CS, ES, DS	Effective address.

### Effective Address Calculation for Indirect Mem. Access

#### Effective Addr.

Addressing Mode	Displ.		Base Register		Index Register
Reg. Indirect	None None	+ +	BX or BP None	+ +	None SI or DI
Indexed	+127 to -128	+	None	+	SI or DI
Based	+127 to -128	+	BX or BP	+	None
Based + Indexed	None	+	BX or BP	+	SI or DI
Based + Indexed with Displ.	+127 to -128	+	BX or BP	+	SI or DI

