x32 ASYNCHRONOUS FAMILY
64K, 128K, 256K AND 512Kx32 5V/3.3V

EDI's x32 Asynchronous SRAM family is designed in support of Texas Instrument's TMS320C3x and TMS320C4x DSPs. The family includes densities of 64Kx32, 128Kx32, 256Kx32 and 512Kx32. The family of devices are packaged in a 68 pin, 0.99" square PLCC package. Available in either a 5V or 3.3V version the x32 family provides access speeds of 10ns, 12ns, 15ns and 20ns.
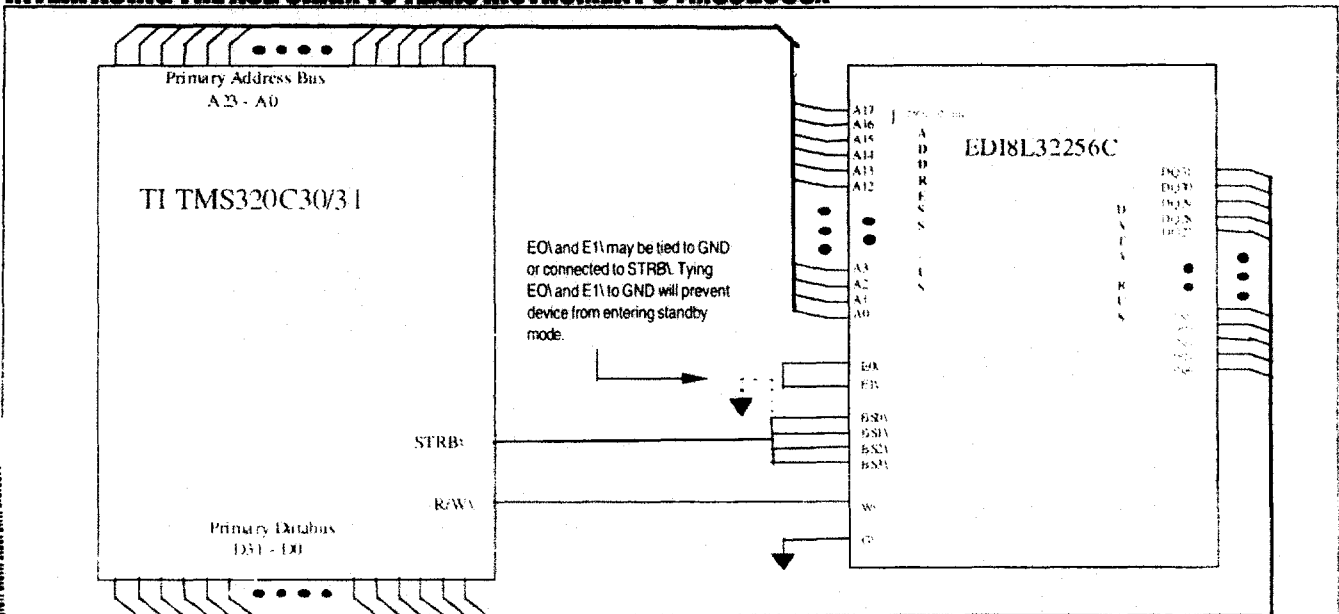
FEATURES

- 3.3V or 5V Operating supply voltage
- Address to output valid (t_{AVQV}) of 10ns,12ns,15ns and 20ns
- Single Component x32 SRAM Array
- Common Control, I/O and Address Lines
- Reduced System capacitance
- Smaller footprint than monolithic solution (up to 56% space savings)
- JEDEC Standard Package, MO-47AE

BENEFITS

- Easier PCB layout and routing
    - Reduced trace lengths, board capacitance
    - 50% fewer active signal connections on system board
- Improved system performance
    - Reduced package inductance
    - Reduced package capacitance
- Upgrade path from 64Kx32 through 512Kx32
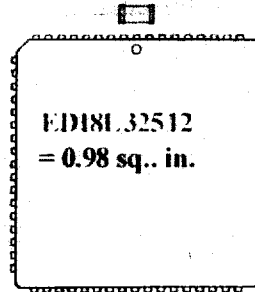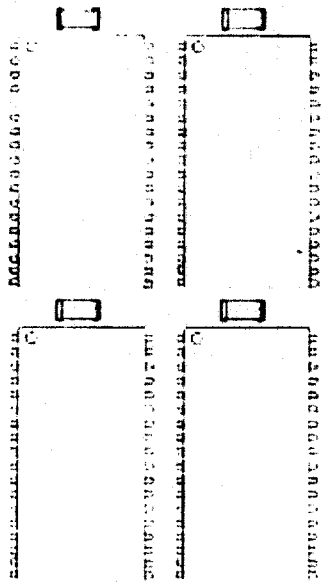- Fit more features on smaller board
- Pick and place assembly

INTERFACING THE X32 SRAM TO TEXAS INSTRUMENT'S TMS320C3x

Primary Address Bus
A 23 - A0

TI TMS320C30/31

EDI8L32256C

E0\ and E1\ may be tied to GND or connected to STRB\. Tying E0\ and E1\ to GND will prevent device from entering standby mode.

STRB\

R/W\

Primary Databus
D31 - D0

Note: Above is example interface for EDI's 256Kx32 SRAM with the TMS320C30/31. Additional information regarding all of EDI's x32 and interfaces to the TMS320C32 and TMS320C4x DSPs can be found on the EDI or TI websites. HTTP://www.electronic-designs.com HTTP://www.ti.com

EDESS00004

EDI8L32512
= 0.98 sq.. in.

Based on 4-512Kx8 36 Pin (400 mil) SOJs

	EDI8L32512	512Kx8 36SOJ(x4)
Board Space Requirements	0.98 sq. mm	2.2 sq mm
Board Connections Required	57 active	120 active

PRODUCT AVAILABILITY vs ACCESS TIMES

Part Number	VCC	Configuration	10ns	12ns	15ns	20ns
EDI8L3265CxxAC	5V	64Kx32			✓	✓
EDI8L32128CxxAC	5V	128Kx32	Q398	Q398	✓	✓
EDI8L32256CxxAC	5V	256Kx32		Q398	✓	✓
EDI8L32512CxxAC	5V	512Kx32		Q298	✓	✓
EDI8L32128VxxAC	3.3V	128Kx32		✓	✓	✓
EDI8L32256VxxAC	3.3V	256Kx32		Q398	✓	✓
EDI8L32512VxxAC	3.3V	512Kx32		Q398	✓	✓

✓ Indicates device is in full production

ORDERING INFORMATION AND AVAILABILITY

Part Number	VCC	Configuration	Availability
EDI8L3265CxxAC	5V	64Kx32	Now
EDI8L32128CxxAC	5V	128Kx32	Now
EDI8L32256CxxAC	5V	256Kx32	Now
EDI8L32512CxxAC	5V	512Kx32	Now
EDI8L32128VxxAC	3.3V	128Kx32	Now
EDI8L32256VxxAC	3.3V	256Kx32	Now
EDI8L32512VxxAC	3.3V	512Kx32	Now