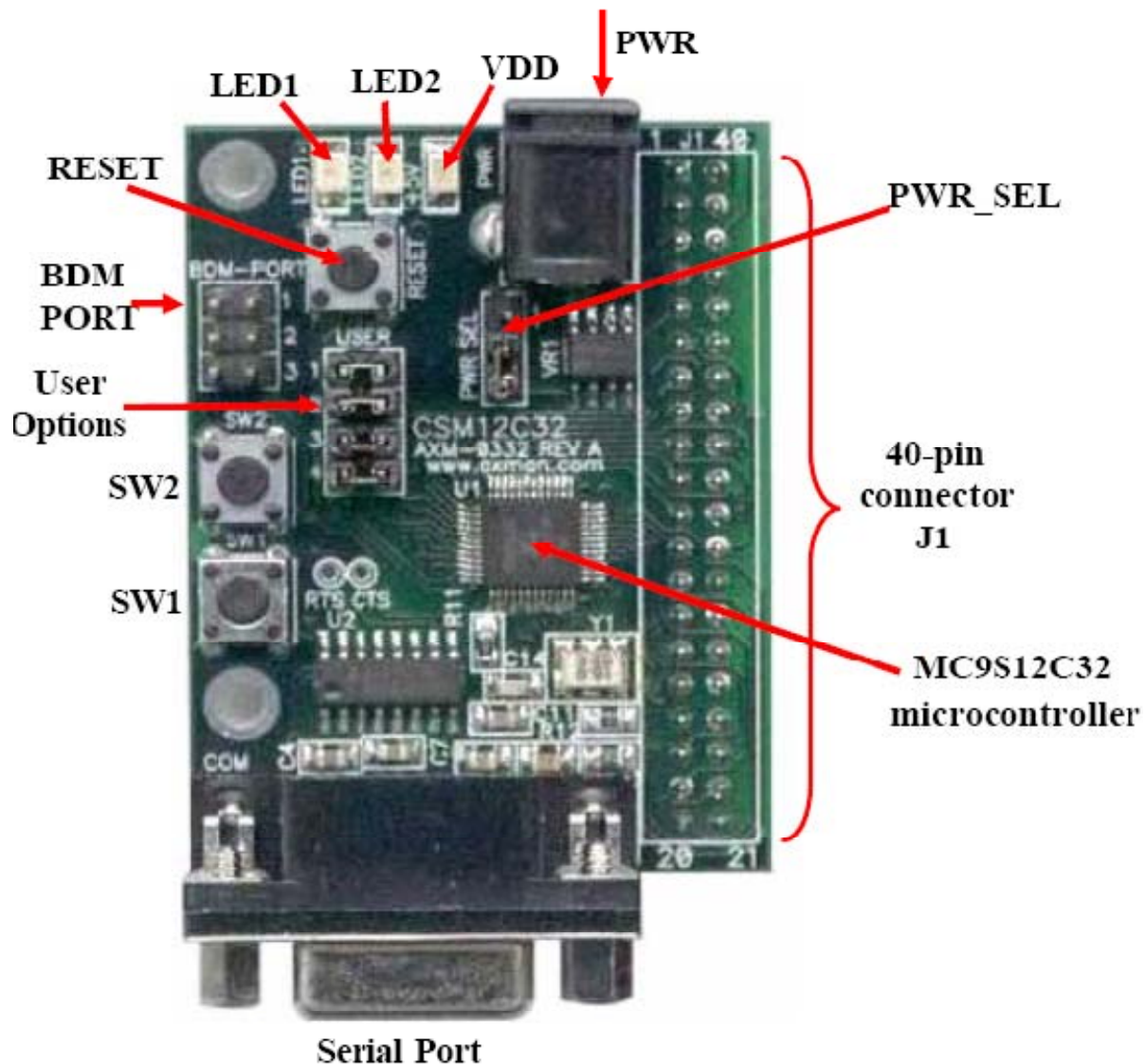
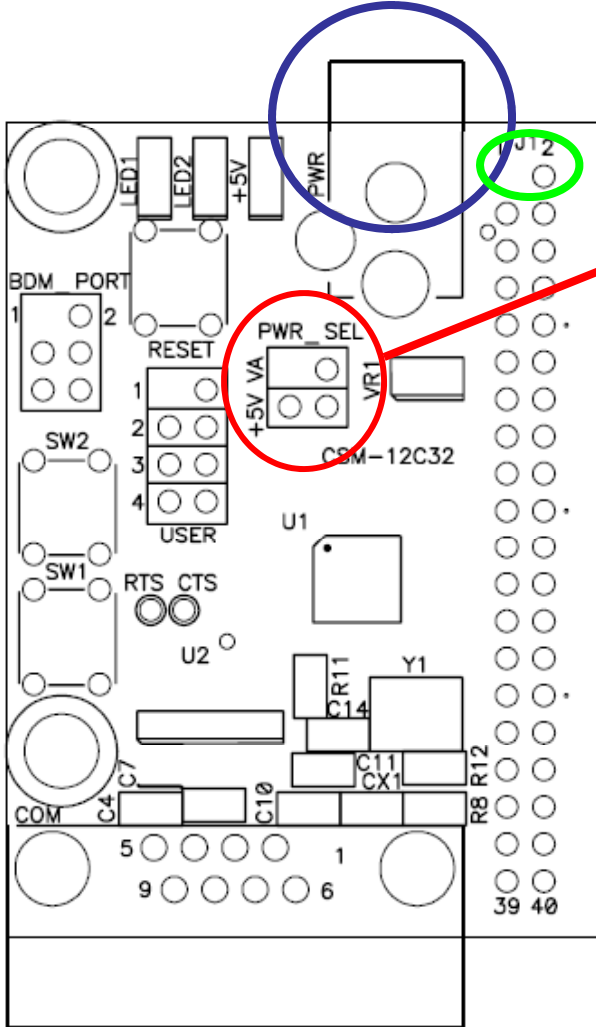


CSM12C32

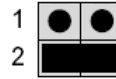


V _x	1	2	PE1/IRQ
GND	3	4	RESET*
PS1/TXD	5	6	MODC/BKGD
PS0/RXD	7	8	NC
PP5/KWP5	9	10	NC
PE0/XIRQ*	11	12	NC
PT0/PW0/IOC0	13	14	NC
PT1/PW1/IOC1	15	16	NC
PM4/MOSI	17	18	PAD00/AN00
PM2/MISO	19	20	PAD01/AN01
PM5/SCK	21	22	PB4
PM3/SS*	23	24	PA0
PE4/ELCK	25	26	PM1/TXCAN
PE7/XCLKS	27	28	PM0/RXCAN
PAD02/AN02	29	30	PT2/PW2/IOC2
PAD03/AN03	31	32	PT3/PW3/IOC3
PAD04/AN04	33	34	PT4/PW04/IOC4
PAD05/AN05	35	36	PT5/IOC5
PAD06/AN06	37	38	PT6/IOC6
PAD07/AN07	39	40	PT7/IOC7

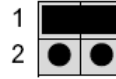
CSM12C32



Güç kaynak seçimi



PWR'den



J1 bağlantısından



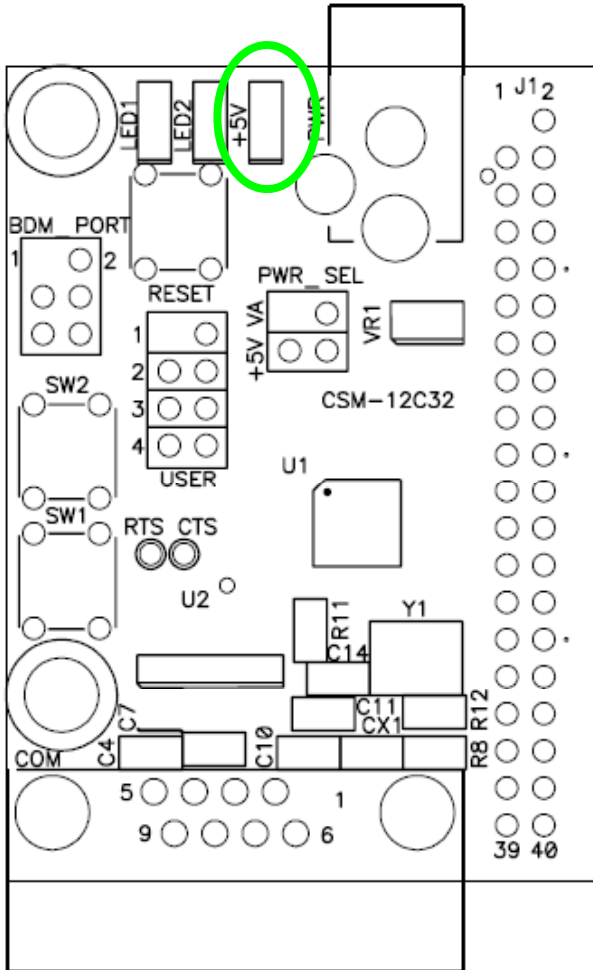
PWR ve J1 bağlantısından

PWR bağlantısından 7-20 V arası giriş kartta kullanılacak 5V DC'ye düşürülür. Genelde 9V DC kullanılır.

J1 bağlantısından verilen güç **regüle edilmez**. 3.3-5V DC verilmelidir. Bunun üzerinde verilirse kart hasar görür.

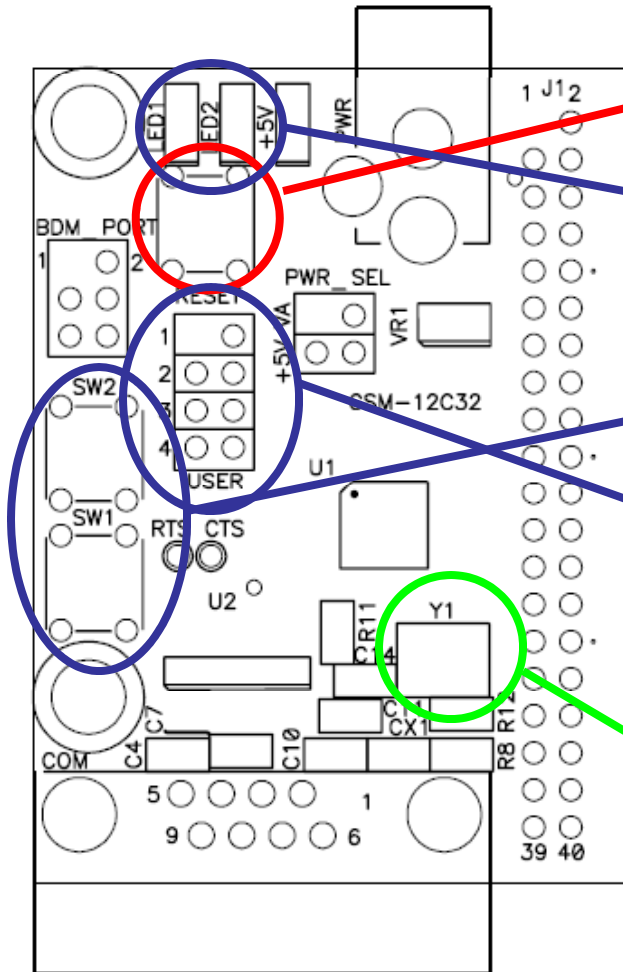
Lab'ta her zaman PWR bağlantısını kullanın !!!

CSM12C32



Karta güç verildiği zaman güç LED'i yanar

CSM12C32



Reset düğmesi: asenkron olarak kartı resetler

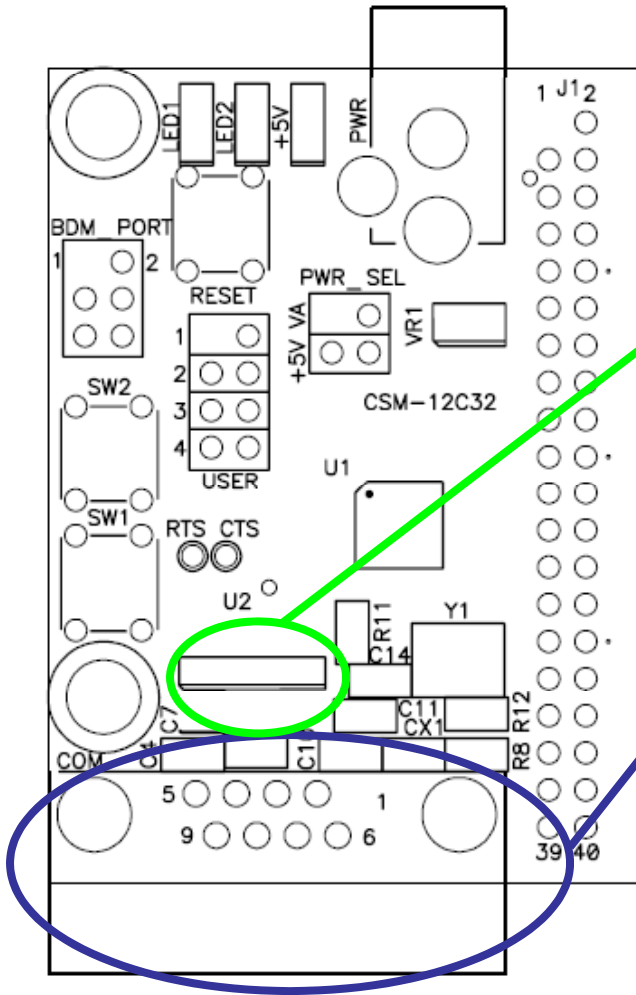
Kullanıcı LED'leri

Kullanıcı tuşları

Jumper	On	Off	MCU Signal
User 1	Enable SW1	Disable SW1	PE0/XIRQ*
User 2	Enable SW2	Disable SW2	PP5 /KWP5
User 3	Enable LED1	Disable LED1	PA0
User 4	Enable LED2	Disable LED2	PB4

Osilator: 16 MHz. Frekansında osilasyon yapar. Kartın 8MHz saat hızında çalıştırır. Gömülü PLL ile daha yüksek saat hızları sağlanabilir

CSM12C32

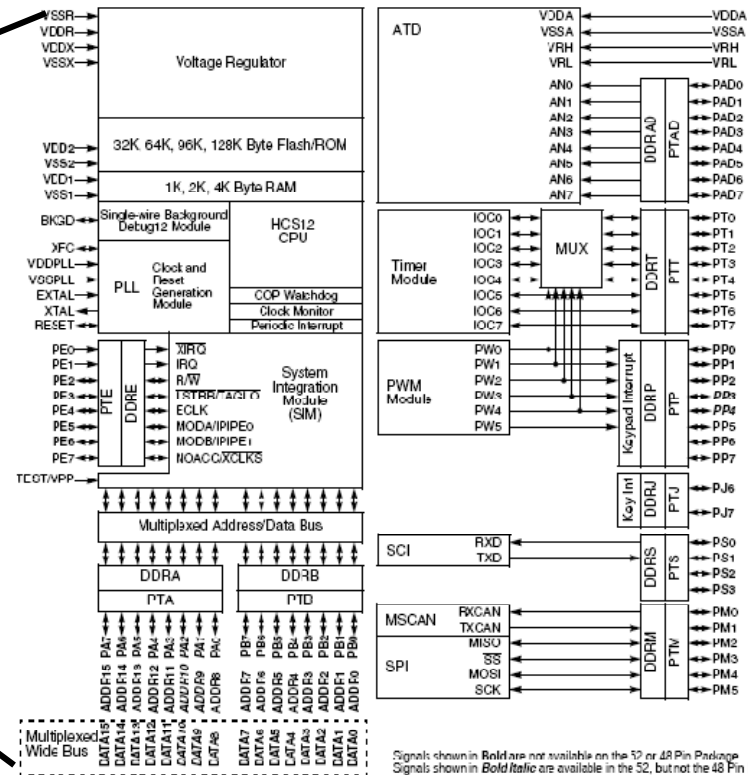
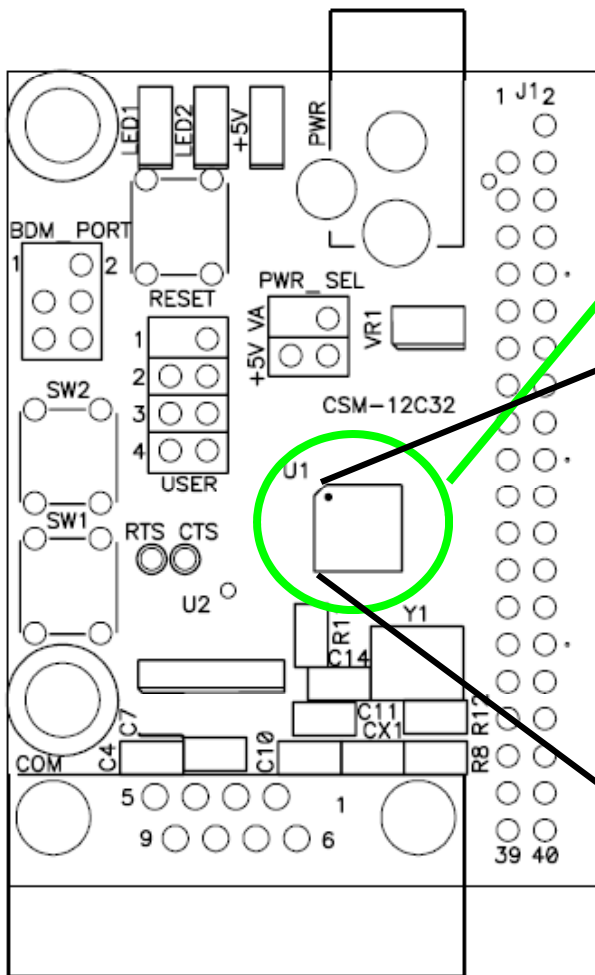


APS12C32SLK modülü – RS232
bağlantısı ile seri haberleşme

Bilgisayar bağlantısı

CSM12C32

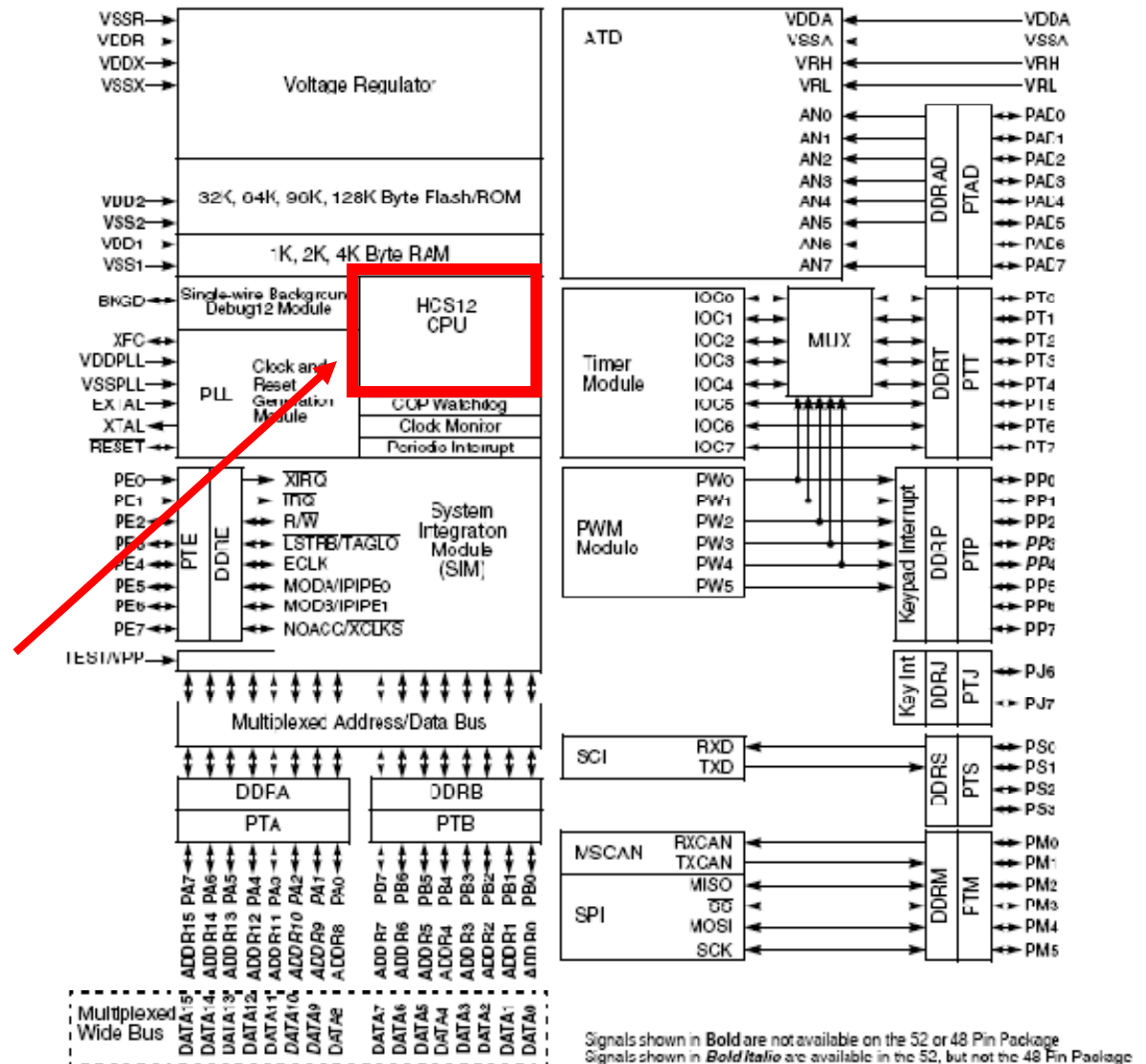
MC9S12C32 mikrodnetleyicisi



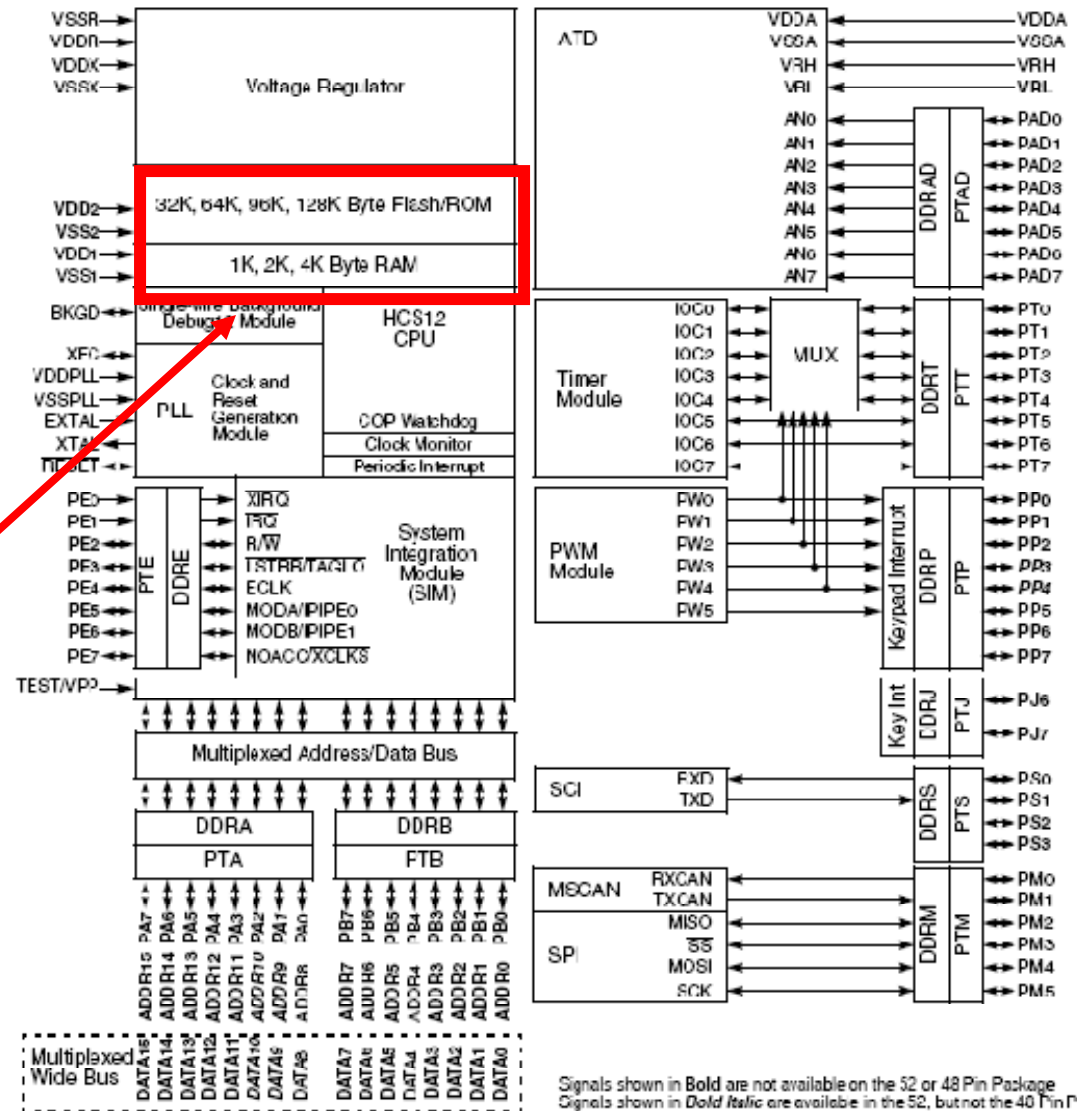
Signals shown in **Bold** are not available on the 52 or 48 Pin Package.
Signals shown in **Bold Italic** are available in the 52, but not the 48 Pin Package.

MC9S12C32

Mikroişlemci



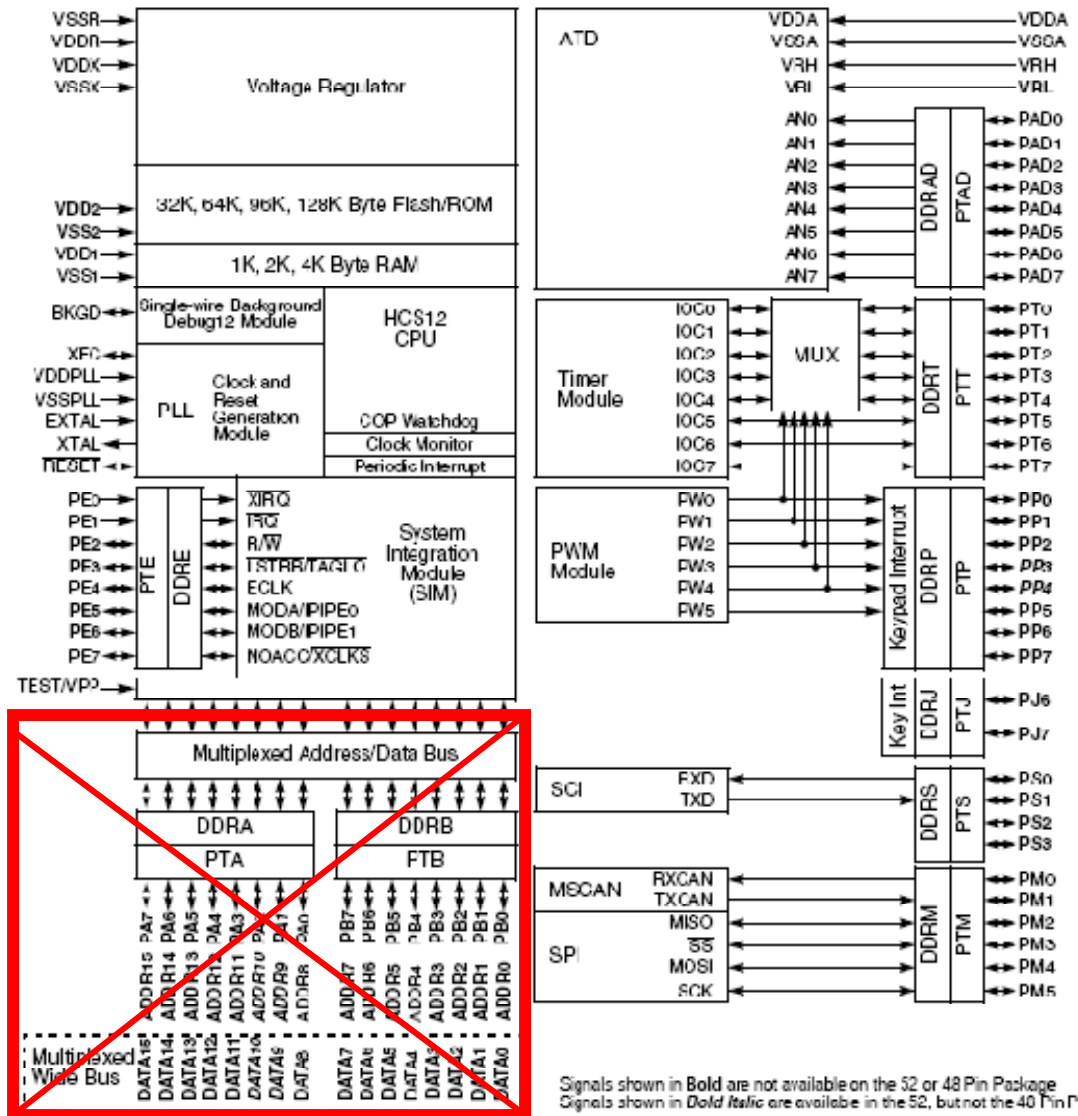
MC9S12C32



Hafıza – 2K SRAM ve 32K Flash (EEPROM yok)

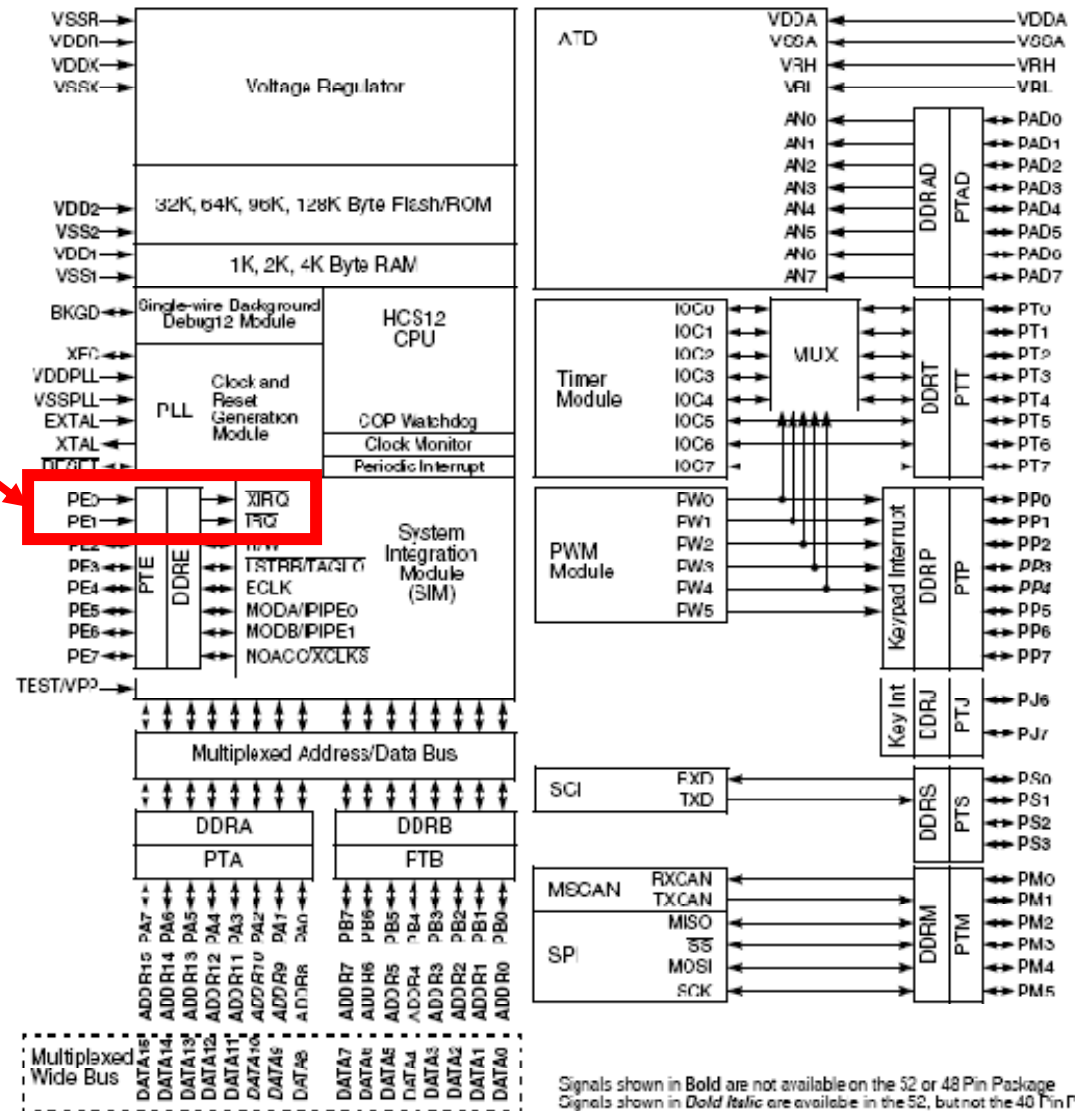
MC9S12C32

48 girişli MC9S12C32'de
bu bağlantılar
bulunmamaktadır



MC9S12C32

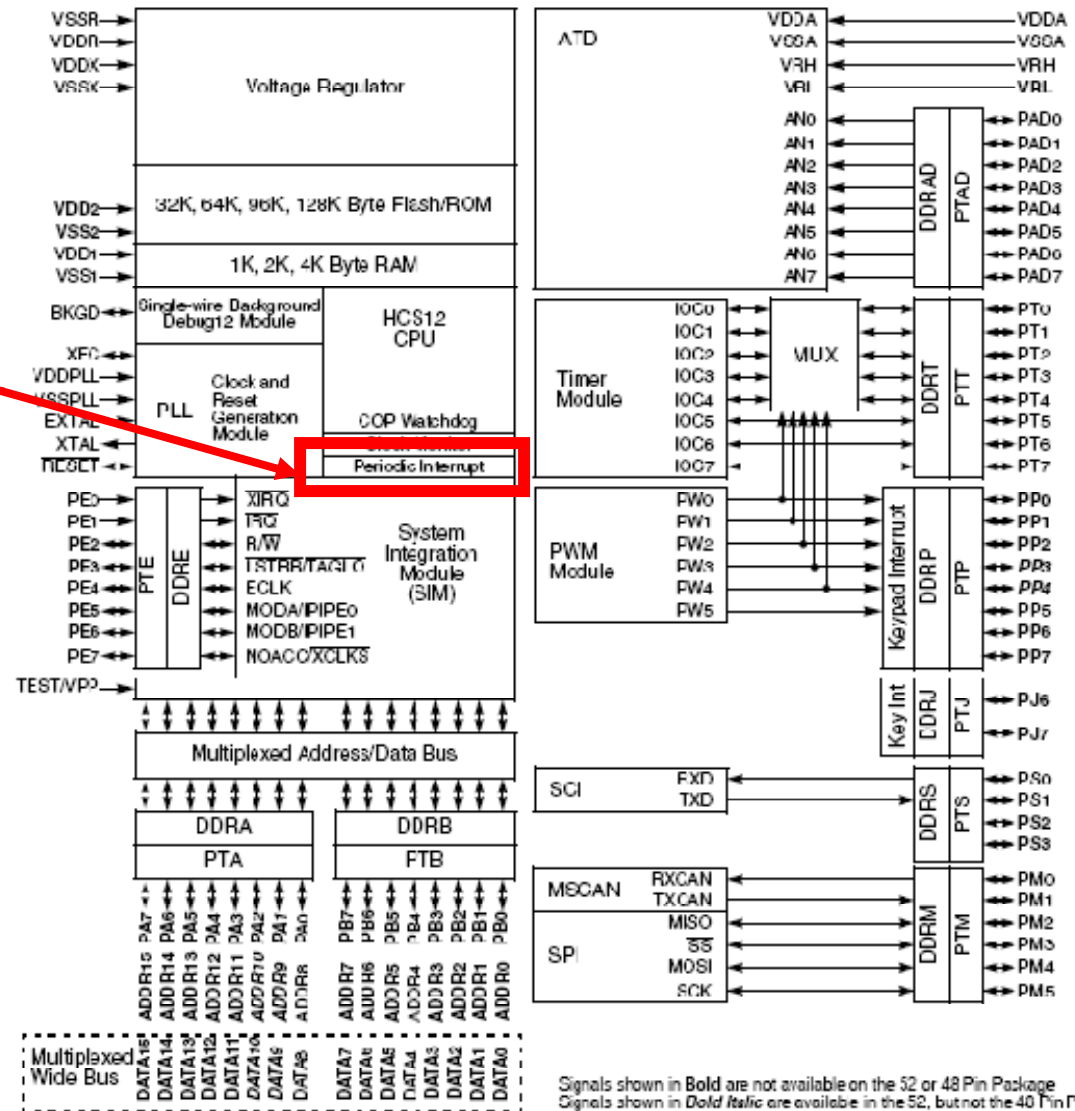
Dış kesme girişleri
(Port E)



Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Dotted Italic* are available in the 52, but not the 40 Pin Package

MC9S12C32

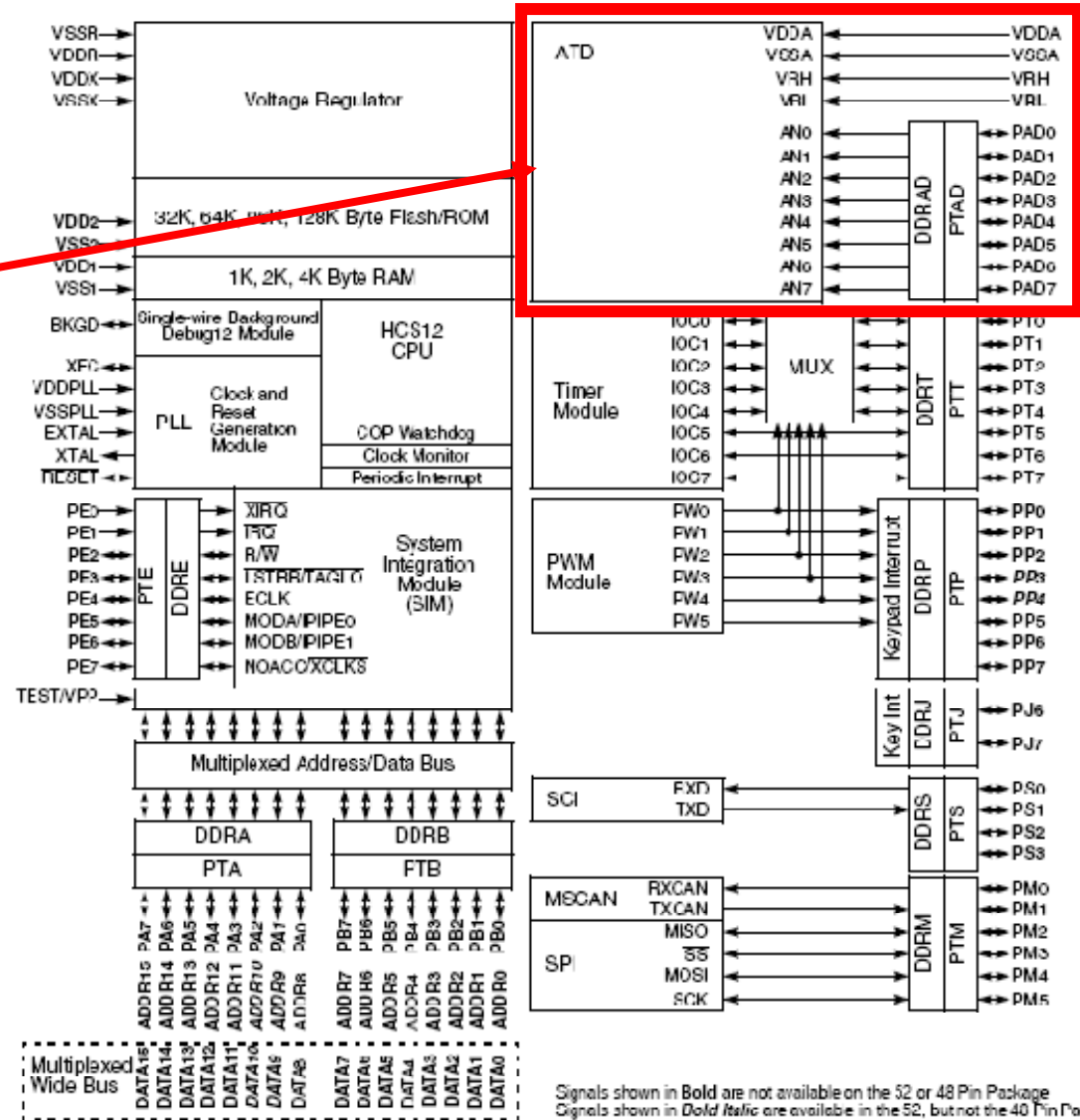
Gerçek zamanlı kesme modülü (RTI)



Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Dotted Italic* are available in the 52, but not the 40 Pin Package

MC9S12C32

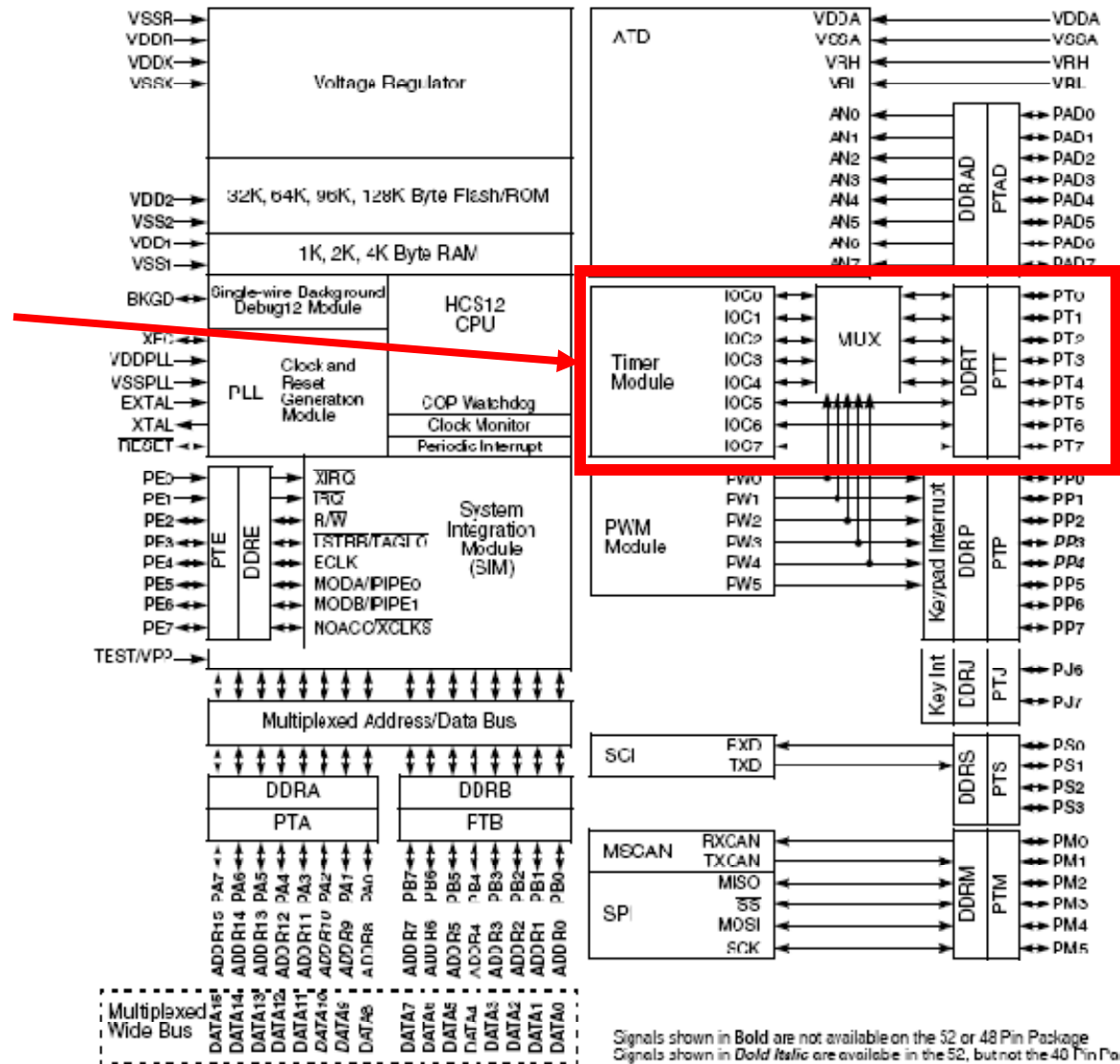
Analog-sayısal
dönüştürüsü – Çıkışlar
PAD portundan



Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Dotted Italic* are available in the 52, but not the 40 Pin Package

MC9S12C32

Zamanlama modülü
(TIM) – Port T

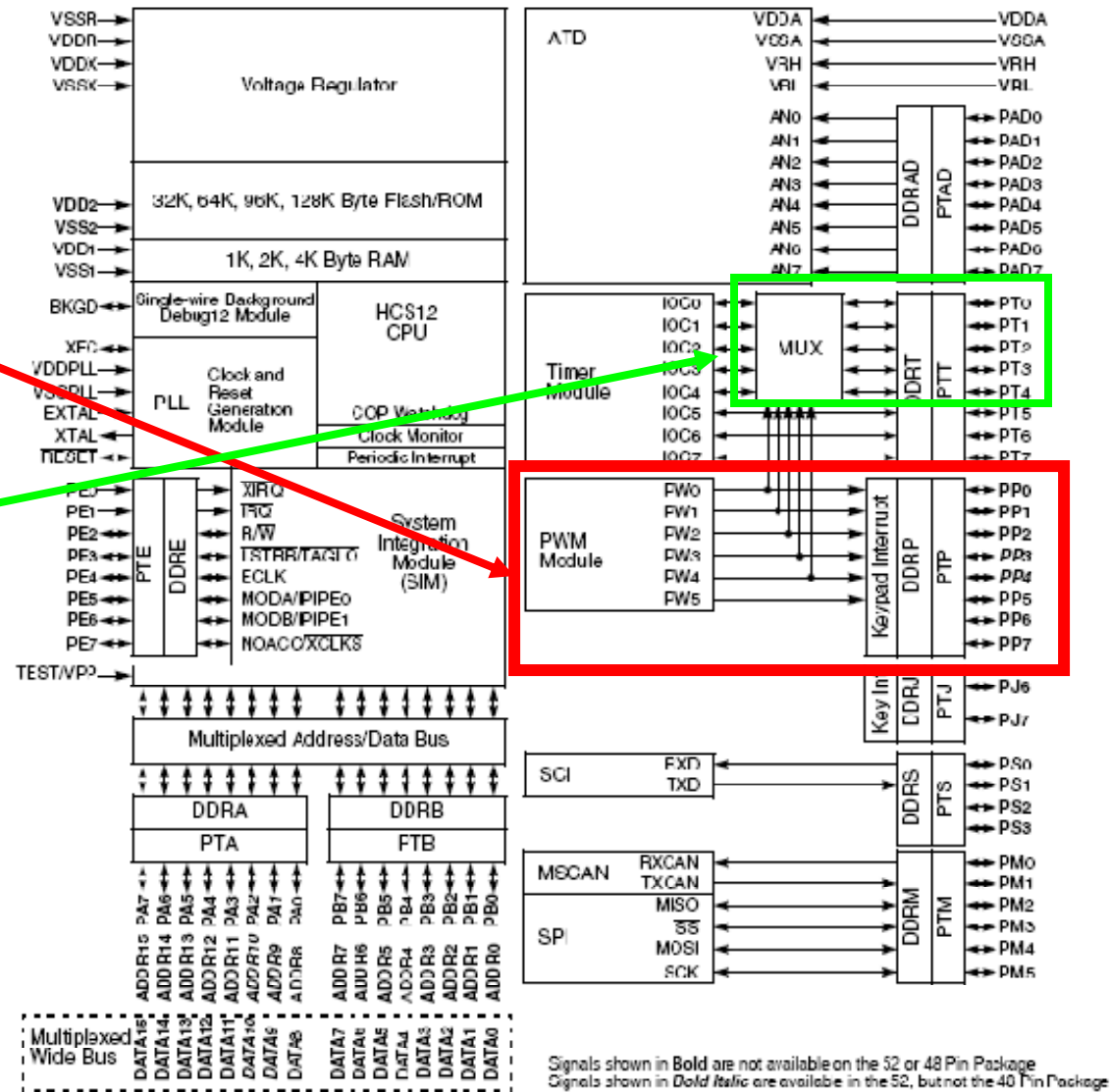


Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Dotted Italic* are available in the 52, but not the 40 Pin Package

MC9S12C32

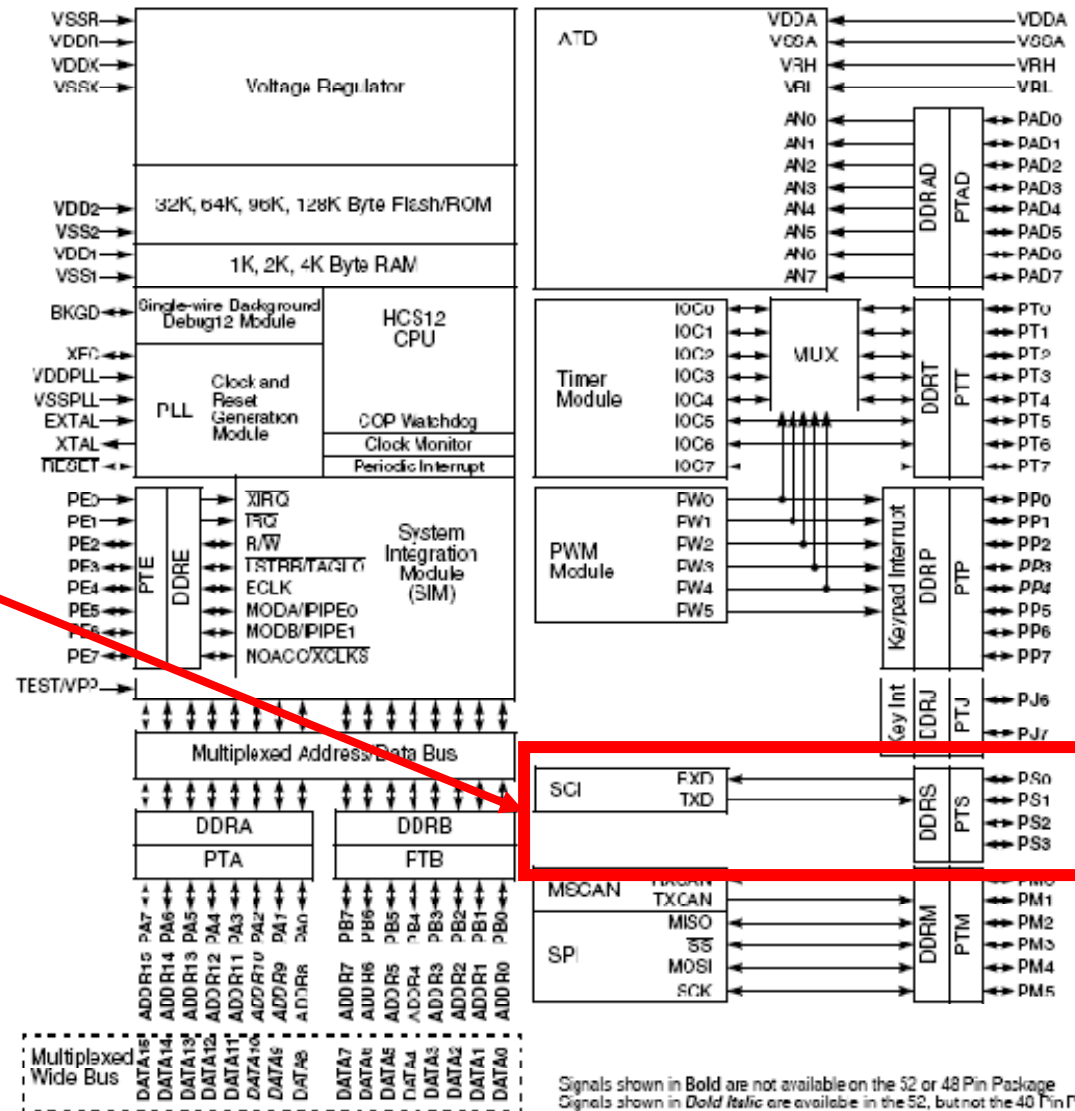
Darbe genişlik
modülasyon modülü.

Giriş/Çıkış TIM ile
paylaşıyor. MODRR
register ayarları ile
çıkışların TIM/PWM
olacağı ayarlanıyor



MC9S12C32

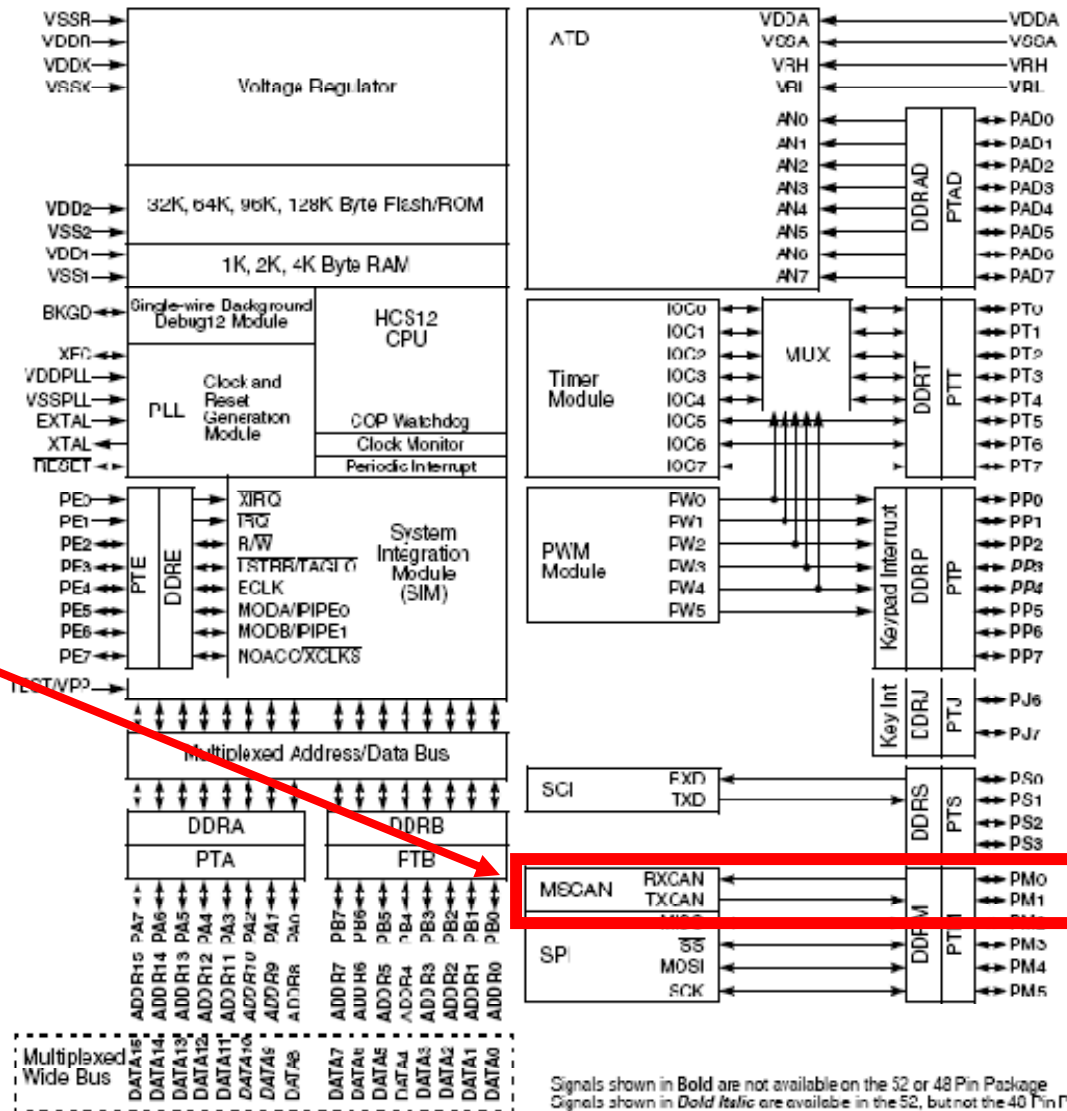
Asenkron seri iletişim
(SCI) modülü – Port S



Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Bold Italic* are available in the 52, but not the 40 Pin Package

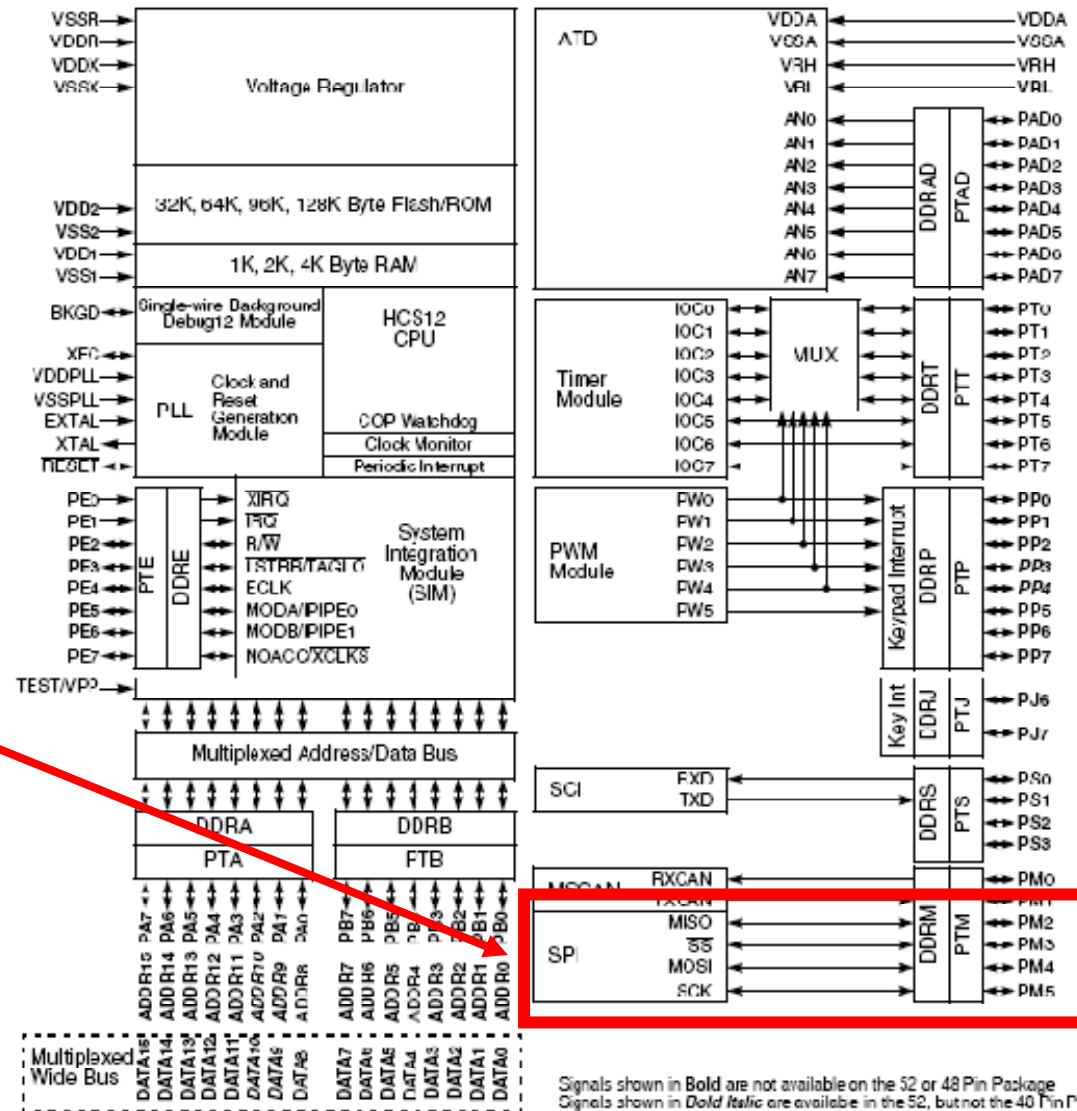
MC9S12C32

Denetleyici alan ağı
(MCAN) modülü



Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Bold Italic* are available in the 52, but not the 40 Pin Package

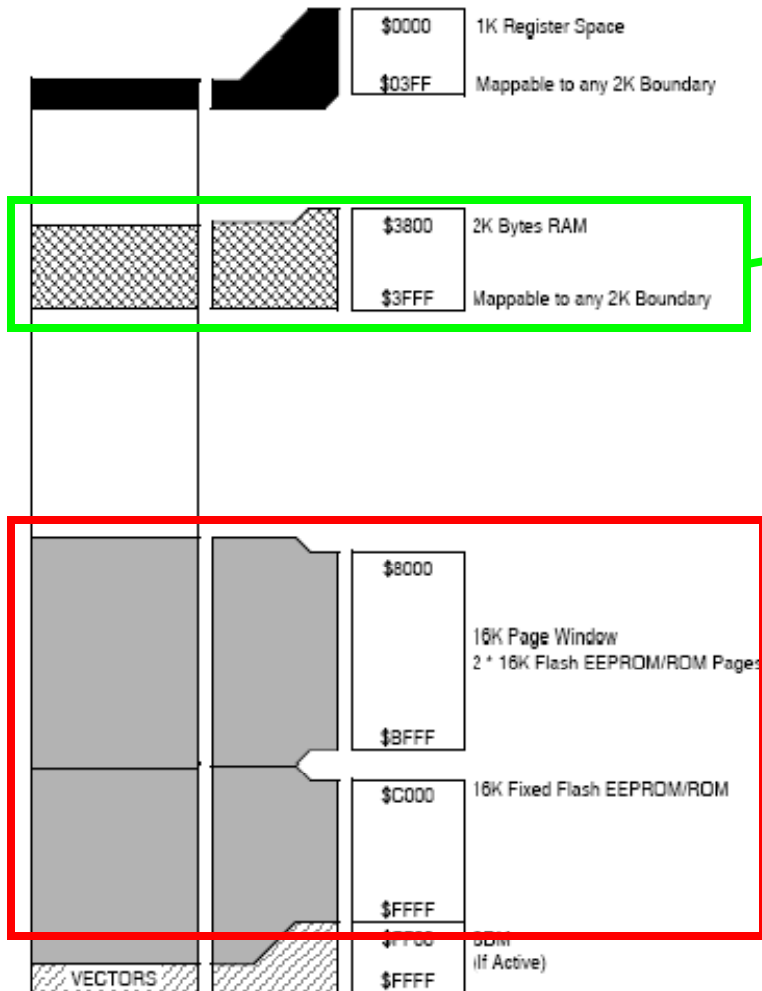
MC9S12C32



Sekron çevre arayüz modülü (SPI) – Port M

Signals shown in **Bold** are not available on the 52 or 48 Pin Package
Signals shown in *Dold Italic* are available in the 52, but not the 40 Pin Package

MC9S12C32 – Hafıza



2k RAM

- değişkenler
- yığın
- test programları

~30k FLASH

- Sabit veriler
- Programlar
- Vektörler

Önümüzdeki Hafta

- Kartı ve bilgisayar programını tanıtmak için kısa bir deney
- Deney için gerekli döküman Ninova'da olacak
- HC12S komut seti ve diğer dokümanlar Ninova'da var