

RS-232 FI Load Procedure

Revision 2.1
Revised by SL
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Lower baud rates may be configured by scaling the CMX7032 clock frequency.
All data is written as 16-bit words.

Carriage Return and Line Feed characters are not required when sending data to the CMX7032.
These are added below to enhance viewing in a terminal window. Omission of the CR LF, particularly when writing the FI block data, may significantly decrease load times.

```
Clock = 19.2MHz           //Clock may be scaled to scale the RS232 baud rate
                          //Eg. 6.144MHz clock gives 115.2kbaud
RS232 = 360k,8,n,1       //360kbaud, 8 data bits, 1 stop bit and no parity.
Booten1 = 1
Booten2 = 1
Power-up/Reset
```

```
Returns: Hello<CR><LF>    //Device is ready
```

```
Send: #<CR><LF>
```

```
Returns: >
```

```
Send: DB1_len<CR><LF>
```

```
Send: DB1_ptr<CR><LF>
```

```
Repeat until all words from Block 1 have been sent:
```

```
    Send: DataWord[n]<CR><LF>
```

```
    Returns: . (repeats after every 16 words to confirm download activity)
```

```
    Increment n
```

```
Returns <CR><LF>          //New line ready to start next FI block load
```

```
Send: #<CR><LF>
```

```
Returns: >
```

```
Send: DB2_len<CR><LF>
```

```
Send: DB2_ptr<CR><LF>
```

```
Repeat until all words from Block 2 have been sent:
```

```
    Send: DataWord[n]<CR><LF>
```

```
    Returns: . (repeats after every 16 words to confirm download activity)
```

```
    Increment n
```

```
Returns <CR><LF>          //New line ready to start activation
```

```
Send: #<CR><LF>
```

```
Returns: >
```

```
Send: Activate_len<CR><LF>
```

```
Send: Activate_ptr<CR><LF>
```

Returns: 4010<CR><LF> //where 4010 = value of Activate_ptr

Booten1 = 0

Booten2 = 0

NReset = 0

RS232 = 38.4k,8,n,1

Clock = 19.2MHz

NReset = 1

Wait while CMX7032 initialises.

Returns: \$PCML CMX7032 FI-2nnn<CR><LF> //where nnn is revision numbers of FI

CMX7032 is now ready for data reception

NRESET should be held low while changing the baud rate and clock rate to prevent unexpected operation.