



The vocoder data rate is fixed at 3600bps minimum but it is burst read. The data rate is 2400bps continuous. Using asynchronous data at 8,n,1 we need a final data rate of at least $1.25(2400+3600)=7500$ bps. This is possible if the modem can maintain a 9600bps link. Falling back to 7200bps will mean dropping the data feed rate to $7200/7500*2400=2304$ bps. If the data feed is from an RS-232 feed for example, then the handshake can be used to reduce the maximum transfer rate to the required 2304bps.

The data feed's FIFO size is dependent on the interleaving used by the processor and the number of 20ms frames read from the CMX838 per burst (1-4). Assuming 1x20ms per burst, then the FIFO must be at least $2400 \times 0.02 = 48$ bits. Add a small overhead for processor latency.

The vocoder is burst read so a FIFO must be provided to buffer the data from the vocoder. The size must be equal to the number of frames read at each interval and the minimum frame size is 20ms giving 72-bits minimum for the vocoder FIFO.