



**MMWL-001**

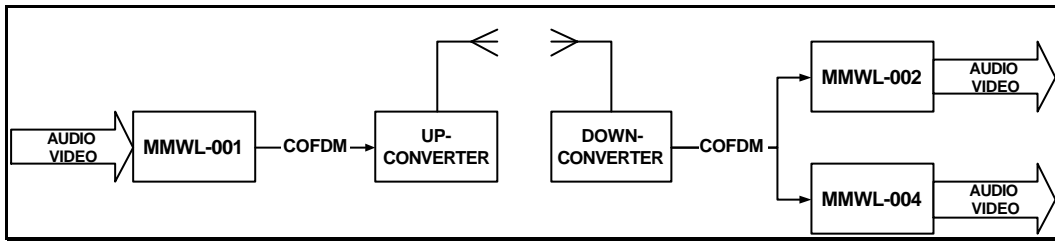
**4:2:2 MPEG-2 / COFDM Modulator**

MMWL-001 is a COFDM modulator evaluation system designed by M.B. International. It is the encoding plus modulation path for a COFDM digital wireless video link. Full broadcast quality is guaranteed by M.B. International proprietary COFDM design and a MPEG-2 4:2:2 high quality video encoding.

Ultra small size and very low power consumption make it the base for developing custom COFDM Wireless Camera Links.

MMWL-001 is provided to demonstrate the high quality of M.B. International COFDM solutions.

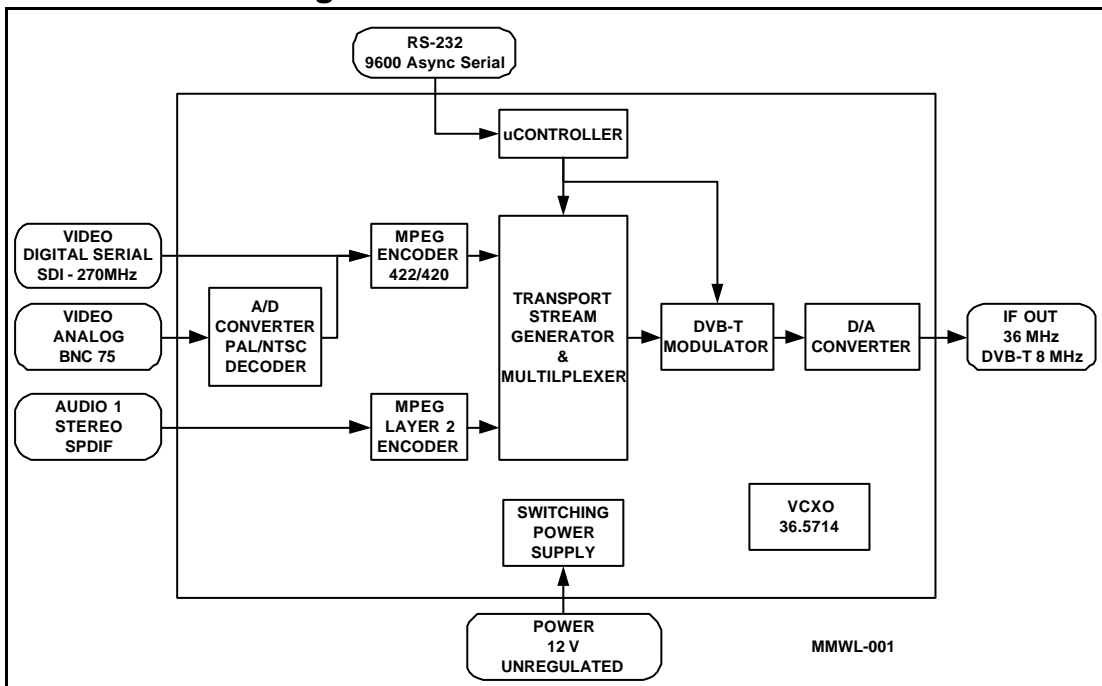
MMWL-001 is the Broadcast quality companion COFDM encoder/modulator for the MMWL-002 or the MMWL-004 demodulator/decoder evaluation system.



The evaluation system is composed of:

- 1. MPEG-2 low delay 4:2:2 (4:2:0) Encoding board
- 2. SOFDM-011-A COFDM Modulator
- 3. A/V and control interface board

**MMWL-001 Block Diagram**





## **MMWL-001 Features**

### Inputs:

1. Analog Audio (L+R)
2. Analog Video
3. Digital Video (SDI)

### Outputs

1. 2K COFDM, IF (36 MHz), 8 MHz bandwidth

### Interface

1. Nr. 1 serial RS 232 for both MPEG encoder and COFDM modulator

### OFDM Performances:

1. Output Level = -16 dBm
2. Channel filter = - 60 dBc @ +- 5.5 MHz
3. Spurious < - 70 dBc @ +- 10 MHz from center freq.
4. Spurious < - 85 dBc @ +- 10-+- 50 Mhz from center freq.
5. Aliases higher than 100 MHz
6. MER : > 39 dB, typical 42 dB
7. COFDM settings: all non hierarchical modes of ETS 300 744 and ETS EN 301 701

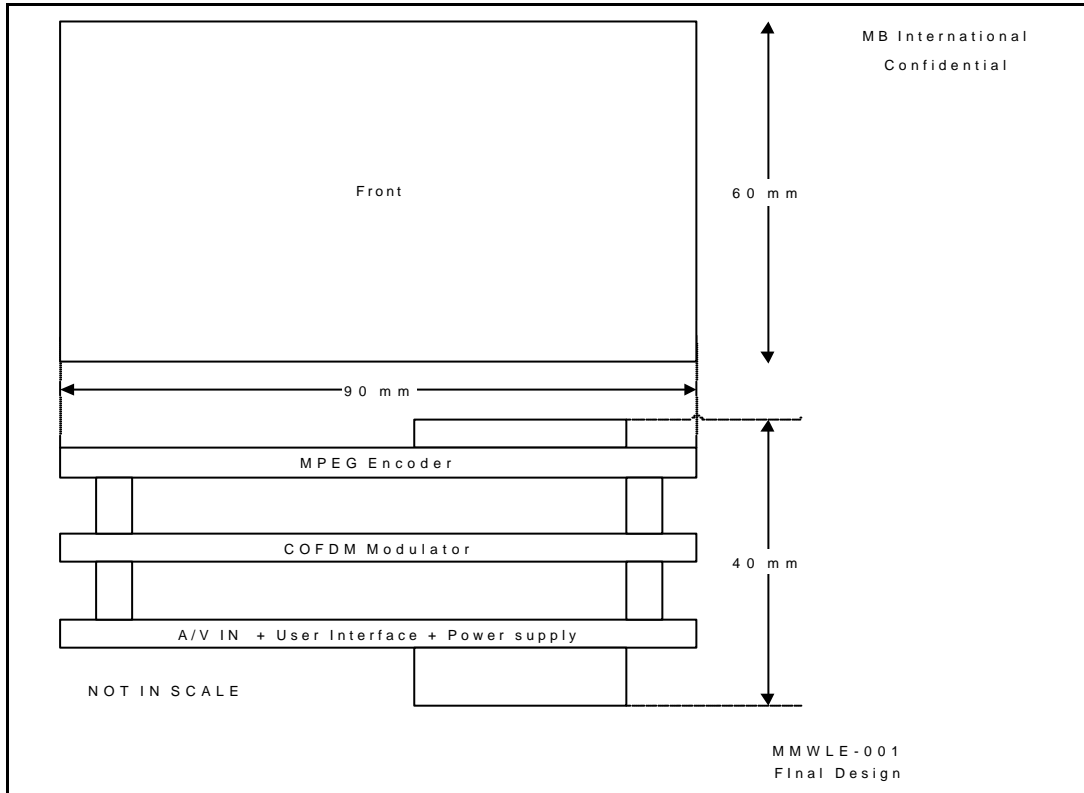
### Other Performances:

1. MPEG 2 modes: 422P@MP and ML@MP modes
2. Low delay encoding available
3. Single 12 V unregulated power supply
4. Total power consumption: less than 10 W
5. Custom Scrambling (available on custom products only)



**MMWL-001 Board Dimensions**

The complete exciter dimensions based on MMWL-001 evaluation board could be as follows:



MBI reserves the right to change dimensions and features for amelioration purposes.