



Description

The PT8402 is a single chip MPEG audio decoder capable of decoding all layers of compressed elementary streams, as specified in MPEG 1 and MPEG 2 ISO standards, including the so-called MP3. Another decoding function that PT8402 supports is AAC (Advance Audio Coding.).

In addition to decoding function, this chip also includes a high-performance D/A converter and headphone driver, so the user can eliminate the need of external DAC and output circuit.

With external A/D converter, it can also compress incoming signal by using ADPCM algorithm, therefore it can also playback ADPCM bitstream.

Features

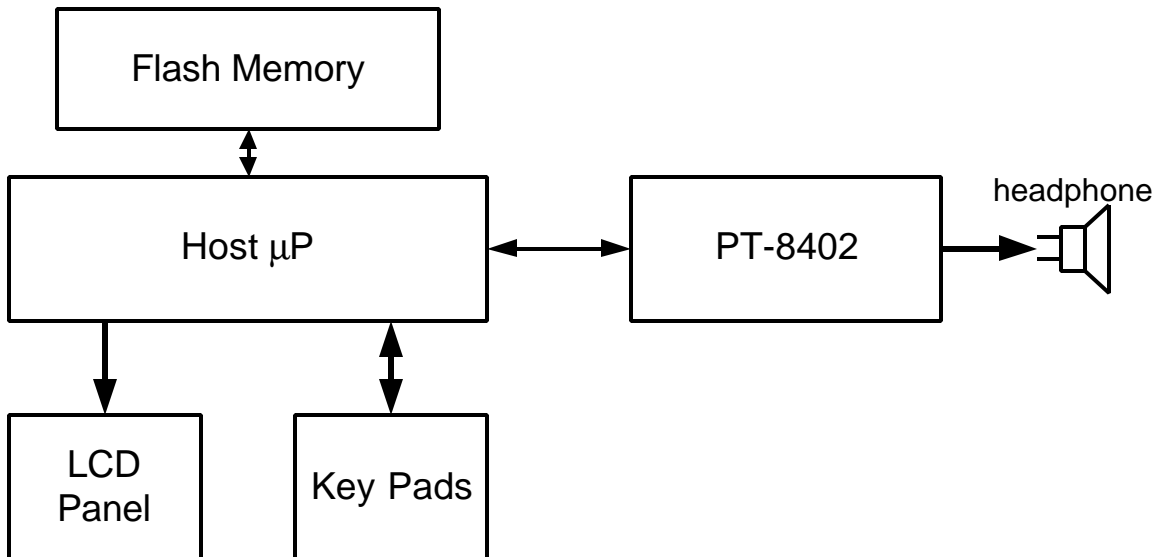
- Supports all the Sampling Frequency of MPEG1 (32/44.1/48KHz) and MPEG2(16/22.05/24KHz).
- Supports AAC ADTS, ADIF Bitstream.
- Serial Bit Stream Input Interface
- I²S/Normal Audio Data Output Format delivered via a Serial Bus
- Power Saving Mode Support
- DAC Master Clock (256*fs / 384*fs for 16 / 24 bit DAC) is supported
- Built-in Volume and Digital Equalizer Control
- Bass Booster, 3D Sound.
- Low Operating Voltage, 2.5V.
- 100-pin, LQFP Package

Applications

- Portable MP3 Player
- PDA
- CD/MP3 player
- All other MP3 applications.



Typical Application





Pin Configuration

		NC	GPI01	GND_IO	TEST1	GPI02	NC	GPI03	NC	GPI04	NC	GPI05	GND_IO	VCC_IO	NC	GPI06	NC	DSPRDY	GND_IO	CLKI	VCC_IO	PWR_DWN	NC	/RST	GND_IO	VCC_IO		
VCC_IO	1	P	100	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	
GND_IO	2	P	I/O	P	I	I/O	I/O	I/O	I/O	P	P	I/O	O	P	I	P	I	I	P	P	I	P	I	I	P	P	75	
GPI00	3	I/O																									74	
NC	4																										P	73
GPI015	5	I/O																									O	72
NC	6																										I	71
GPI014	7	I/O																									O	70
NC	8																										I	69
VCC_K	9	P																									O	68
GND_K	10	P																									I	67
GPI013	11	I/O																									I	66
NC	12																										P	65
GPI012	13	I/O																									P	64
NC	14																										O	63
VCC_IO	15	P																									P	62
GND_IO	16	P																									O	61
GPI011	17	I/O																									P	60
NC	18																										P	59
GPI010	19	I/O																									P	58
NC	20																										I	57
GPI09	21	I/O																									I	56
NC	22																										O	55
GPI08	23	I/O																									I	54
VCC_IO	24	P																									O	53
GND_IO	25	P																									I	52
			O	P	P	O	I	I	P	P	I	I	I/O	I/O	P	O	P	O	O	O	P	P	I	P	O		I	51
	26																										O	
	27																											
	28																											
	29																											
	30																											
	31																											
	32																											
	33																											
	34																											
	35																											
	36																											
	37																											
	38																											
	39																											
	40																											
	41																											
	42																											
	43																											
	44																											
	45																											
	46																											
	47																											
	48																											
	49																											
	50																											
		NC	PD_REQ	NC	VCC_IO	GND_IO	PD_ACK	PD_ENA	B_ENA1	VCC_K	GND_K	BD1	BCK1	MCLKIN	I2CC	I2CD	VCC_IO	MCLKO	GND_IO	ADQO	ALRQO	ACKO	VCC_K	GND_K	TE	DVDD		

Figure 1 : Pin Assignment (P : Power pins, I/O: IO pins)



Application Circuit

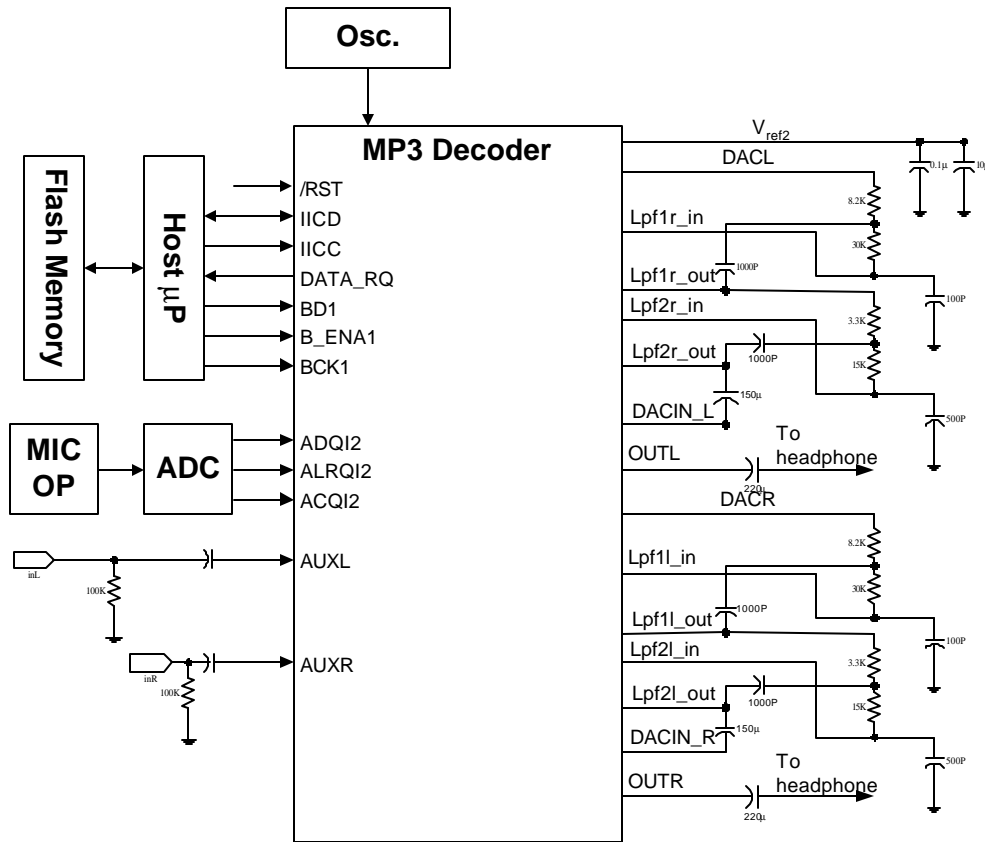


Figure 2 : Typical Connection Diagram