

Comtech AHA Corporation Forward Error Correction Integrated Circuits

Choose the right FEC product	Algorithm	Code	Full/Half Duplex	Payload Data Rate	Max Block Size	Package	Temperature Grades	On-Chip Functions	Standards	Evaluation Software
AHA4011	RS	T=10 Block size=255	Half Duplex	10 Mbytes/sec	2K bits	PLCC	Commercial	6	IESS-308	Yes
AHA4012	RS	T=10 Block size=255	Half Duplex	1.5 Mbytes/sec	2K bits	PLCC	Commercial Industrial	6	IESS-308	Yes
AHA4013	RS	T=10 Block size=255	Half Duplex	12.5 Mbytes/sec	2K bits	PLCC	Commercial	6	IESS-308	Yes
AHA4501	TPC	2D, 3D	Half Duplex	25 Mbits/sec	4K bits	MQFP	Commercial Industrial	5, 7	802.16a	Yes
AHA4524	TPC	2D, 3D 2D+	Full Duplex	50 Mbits/sec	4K bits	TQFP	Commercial Industrial	3, 4, 5, 6	802.16a	Yes
AHA4540	TPC	2D, 3D 2D+, 3D+	Full Duplex	155 Mbits/sec	16K bits	MQFP	Commercial Industrial	1, 2, 3, 4, 5, 6, 7	802.16a	Yes
AHA4541	TPC	2D, 3D 2D+, 3D+	Full Duplex	311 Mbits/sec	16K bits	MQFP	Commercial Industrial	1, 2, 3, 4, 5, 6, 7	802.16a	Yes

Algorithms

RS - Reed-Solomon

TPC - Turbo Product Codes

Codes

2D - 2 Dimensional Array

3D - 3 Dimensional Array

2D+ - 2D Enhanced TPC Code

3D+ - 3D Enhanced TPC Code

On-Chip Functions

1. Demodulation Support
2. Synchronization
3. DVB Type Scrambler
4. CRC (Cyclic Redundancy Check)
5. Helical Interleaver
6. Shortening
7. Separate Microprocessor Interface

