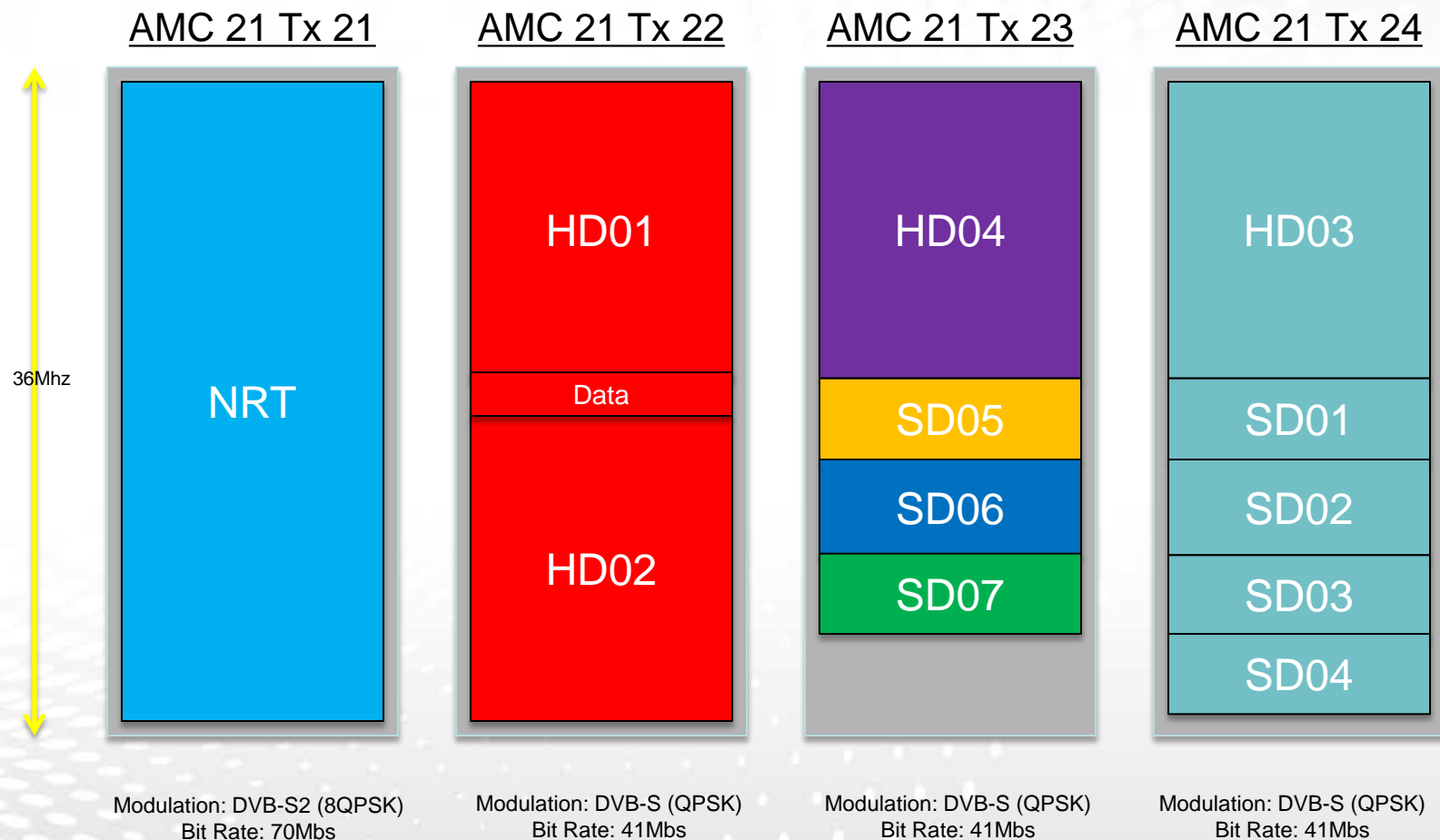
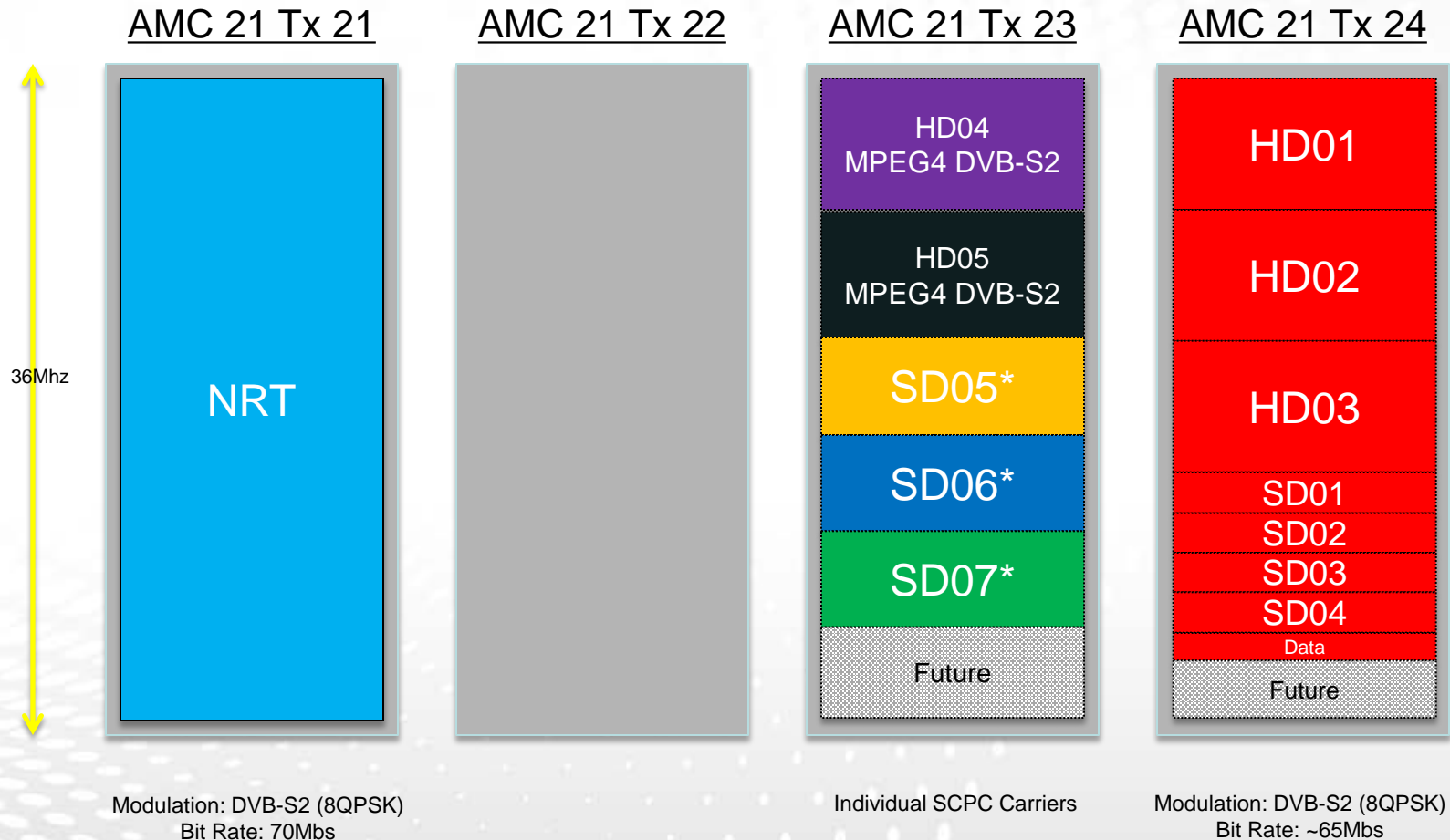


# TRANSPONDER LAYOUT TODAY

## MPEG-2 Distribution



# MPEG-4 TRANSPONDER LAYOUT



\* SD05, SD06, SD07 will be uplinked as MPEG4, DVB-S2 from PBS, but transponder space will be retained to allow local stations to uplink MPEG2, DVB-S

# MPEG 2 vs. MPEG 4 BIT RATES

	<u>MPEG 2</u>		<u>MPEG 4</u>	
	<u>Video</u>	<u>Audio</u>	<u>Video</u>	<u>Audio</u>
HD01	17Mbs	384Kbps	12Mbs	448Kbps
HD02	17Mbs	384Kbps	12Mbs	448Kbps
HD03	17Mbs	384Kbps	12Mbs	448Kbps
HD04	17Mbs	384Kbps	12Mbs	448Kbps
HD05	***	***	12Mbs	448Kbps
SD01	4.5	192Kbps	2	192Kbps
SD02	4.5	192Kbps	2	192Kbps
SD03	4.5	192Kbps	2	192Kbps
SD04	4.5	192Kbps	2	192Kbps
SD05	3	192Kbps	3	192Kbps
SD06	3	192Kbps	3	192Kbps
SD07	3	192Kbps	3	192Kbps

MPEG 4 compression is approximately 50% more efficient than MPEG 2.

# MPEG 2 vs. MPEG 4 AUDIO CHANNEL ASSIGNMENTS

## Proposed \*

	<u>MPEG 2</u>				<u>MPEG 4</u>			
	<u>A1</u>	<u>A2</u>	<u>A3</u>	<u>A4</u>	<u>A1</u>	<u>A2</u>	<u>A3</u>	<u>A4</u>
HD01	L/R or 5.1 (AC3)	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
HD02	L/R or 5.1 (AC3)	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
HD03	L/R or 5.1 (AC3)	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
HD04	L/R or 5.1 (AC3)	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
HD05	***	***	***	***	L/R or 5.1 (AC3)	SAP	DVS	Future
SD01	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD02	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD03	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD04	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD05	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD06	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future
SD07	Left / Right	SAP & DVS	Future	n/a	L/R or 5.1 (AC3)	SAP	DVS	Future