

# Folding – flat cable design re-defined

Increased miniaturization with a simultaneous increase in performance is the defining trend in electronics development, fueling the demand for devices that are ever faster, more compact and rich on features. The new 3M Flat, Controlled Impedance Cable, 7700 Series, meets exactly these needs.

- 30 AWG solid conductors and polyolefin (PO) insulator
- Outer insulation is laminated with a flexible foil covering for controlled impedance with 95 ohm (±5 ohm)
- With programmable differential pairs, grounding and signals. Twenty position cable configuration, e.g.: GG SS GG SS GG SS GG SS GG PP
- Suitable for IDC connectors with a pitch of 1.27 mm
- Available in conductor counts in increments of 10 through 100

## Orderable Part Numbers:

3M Flat, Controlled Impedance Cable, 7700 Series

3M Part Number	Description
<b>Standard 100' Roll (30.48 m Roll):</b>	
7700/10 100'	3M™ 7700/10 100' = 10/CAB/PP/CIMP/30AWG/SLD/.025/100'
7700/14 100'	3M™ 7700/14 100' = 14/CAB/PP/CIMP/30AWG/SLD/.025/100'
7700/16 100'	3M™ 7700/16 100' = 16/CAB/PP/CIMP/30AWG/SLD/.025/100'
7700/20 100'	3M™ 7700/20 100' = 20/CAB/PP/CIMP/30AWG/SLD/.025/100'
7700/30 100'	3M™ 7700/30 100' = 30/CAB/PP/CIMP/30AWG/SLD/.025/100'
7700/50 100'	3M™ 7700/50 100' = 50/CAB/PP/CIMP/30AWG/SLD/.025/100'



## Order now a sample of the Flat Cable, 7700 Series:

**3Melectronics.de@mmm.com**  
(Comment Sample 7700)



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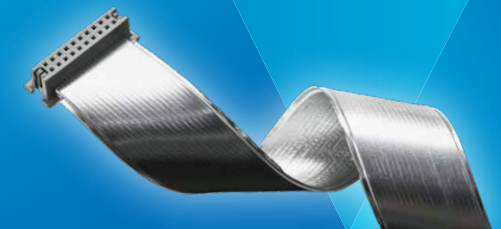


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Flat out fast:  
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Controlled  
Impedance Cable,  
7700 Series.  
**Power inside.**



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# 3M™ Flat, Controlled Impedance Cable, 7700 Series

This high-speed, flat-ribbon cable can support transmission speeds of up to 20 Gbps (cable-only connection), is highly flexible with its 0.635 mm pitch and can be folded. Even in tight spaces, the series can be used with only minimal performance impact.

## Fit for IDC – quick installation, versatile connection options

The flat-ribbon cables are impedance controlled and are therefore suitable for a variety of wire-to-board applications, including communications network equipment, automated test equipment, and more.

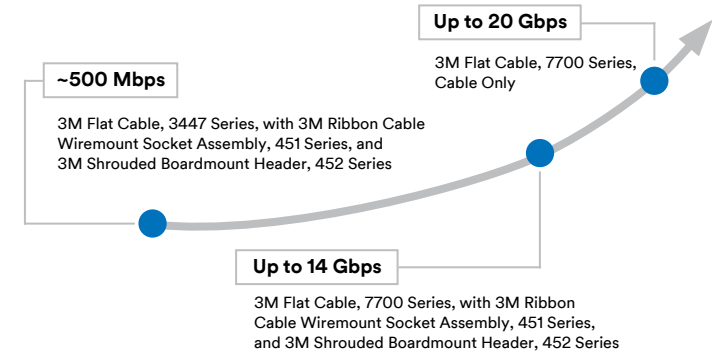
The cable's exceptional versatility means it offers a variety of connection options. The user can determine flexible pinout configurations to manage a wide range of I/O requirements, including up to 100 positions of programmable differential pairs. The cable installs quickly and can be used in end-to-end terminations or directly soldered to a PCB. The 7700 Series flat-ribbon cables are available in conductor counts in increments of 10 through 100.



## High-speed transmission rates even in tight spaces

New device generations will require cables that can offer higher data rates and greater bandwidth – while controlling impedance and attenuation and maintaining flexibility in tight spaces.

Lab tests show the cable can support transmission of a digital signal up to 20 Gbps over 0.25 m or still 10 Gbps over 1 m including a custom test fixture. When terminated to an IDC connector, high data rates of up to 14 Gbps are also possible.



## Comparison of signal quality

