

**U.S. Patent No. 8,327,051**

<p>1[pre]: A portable handheld memory card comprising:</p>	<p>9[pre]: A method comprising:</p> <p>[a]: with a portable handheld card comprising a Universal Serial Bus (USB) port comprising a first set of pins; USB controller circuitry electrically connected with the first set of pins of the USB port; and</p> <p>1[c]: an input/output (I/O) port comprising a second set of pins; and</p> <p>1[d]: I/O controller circuitry electrically connected with the second set of pins of the I/O port;</p> <p>1[e]: a memory in communication with the USB port and the I/O port; and</p> <p>1[f]: a housing storing the memory and exposing the USB port and the I/O port;</p> <p>1[g]: wherein the USB port and the I/O port are positioned on a same end to allow a same card-insertion direction irrespective of whether a host device comprises a mating USB port or a mating I/O port; and</p> <p>1[h]: wherein the USB port and the I/O port are positioned such that when the I/O port is electrically connected with the host device, at least one of the first set of pins of the USB port is not electrically connected to the host device, and</p> <p>1[i]: when the USB port is electrically connected to the host device, at least</p>	<p>16[pre]: A method comprising:</p> <p>16[a]: with a portable handheld card comprising a Universal Serial Bus (USB) port comprising a first set of pins; USB controller circuitry electrically connected with the first set of pins of the USB port; an input/output (I/O) port comprising a second set of pins; I/O controller circuitry electrically connected with the second set of pins of the I/O port; a memory in communication with the USB port and the I/O port; and a housing storing the memory and exposing the USB port and the I/O port, wherein the USB port and the I/O port are positioned to allow a same card-insertion direction irrespective of whether a host device comprises a mating USB port or a mating I/O port and wherein the USB port and the I/O port are positioned such that when the I/O port is electrically connected with the host device, at least one of the first set of pins of the USB port is not electrically connected to the host device, and when the USB port is electrically connected to the host device, at least one of the second set of pins of the I/O port is not electrically connected to the host device;</p>
--	---	--

<p>one of the second set of pins of the I/O port is not electrically connected to the host device.</p>		
	<p>9[b]: reading compressed data from the memory;</p>	
	<p>9[c]: decompressing the compressed data to decompressed data;</p>	
	<p>9[d]: transmitting the decompressed data on the I/O port;</p>	
	<p>9[e]: converting the compressed data to first converted data for transmission on the USB port;</p>	
	<p>9[f]: transmitting the first converted on the USB port;</p>	
	<p>12[pre]: The method of claim 9, further comprising:</p>	
	<p>12[a]: converting the decompressed data to second converted data for transmission on the I/O port; and</p>	
	<p>12[b]: transmitting the second converted data on the I/O port.</p>	
		<p>16[b]: reading data from the memory;</p>
		<p>16[c]: determining whether the data is to be transmitted via the USB port or I/O port; and</p>
		<p>16[d]: transmitting the data to the host device via the determined port.</p>
<p>4: The portable handheld memory card of claim 1 further comprising: a power management unit in communication with the USB controller circuitry.</p>		

<p>5: The portable handheld memory card of claim 1 further comprising: a host interface module in communication with the I/O port.</p>		
<p>6: The portable handheld memory card of claim 1 further comprising: circuitry configured to control read and write operations to the memory.</p>	<p>13: The method of claim 9, further comprising: controlling reading and writing to the memory.</p>	
<p>7: The portable handheld memory card of claim 1, wherein the I/O port comprises a Secure Digital port.</p>	<p>14: The method of claim 9, wherein the I/O port comprises a Secure Digital port.</p>	<p>20: The method of claim 16, wherein the I/O port comprises a Secure Digital port.</p>
<p>8: The portable handheld memory card of claim 1, wherein the memory comprises Flash memory.</p>	<p>15: The method of claim 9, wherein the memory comprises Flash memory.</p>	<p>21: The method of claim 16, wherein the memory comprises Flash memory.</p>
<p>23: The portable handheld memory card of claim 1, wherein at least two pins of the USB port are parallel to at least two pins of the I/O port.</p>		
<p>24: The portable handheld memory card of claim 1, wherein layout for the USB port is different from layout of the I/O port.</p>		
<p>25: The portable handheld memory card of claim 1, wherein the I/O port is configured for mating with an external port.</p>		
<p>26: The portable handheld memory card of claim 1, wherein all of the first set of pins electrically connected with the USB controller circuitry is not electrically connected to the I/O controller circuitry.</p>		

		27[prej]: The portable handheld memory card of claim 1,
		27[a]: wherein the USB port comprises multiple data lines,
		27[b]: wherein the first set of pins comprise multiple data pins connected to the multiple data lines; and
		27[c]: wherein all of the multiple data pins are not electrically connected to the I/O controller circuitry.